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UNITED STATES BUREAU OF EDUCATION.

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CONTRIBUTIONS TO AMERICAN EDUCATIONAL HISTORY.

EDITED BY HERBERT B. ADAMS.

No. 28.

THE UNIVERSITY OF THE STATE OF NEW YORK:

HISTORY OF HIGHER EDUCATION IN THE STATE OF NEW YORK.

BY

SIDNEY SHERWOOD, PH. D.,

Associate Professor of Political Economy in Johns Hopkins University.

WASHINGTON:

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., July 2, 1900.

SIR: I have the honor to transmit for publication the twenty-eighth number in the series of Contributions to American Educational History, edited by Prof. H. B. Adams. The present volume deals with the University of the State of New York and was prepared by Prof. Sidney Sherwood, of Johns Hopkins University, a native of the State and a graduate of Princeton University, who had the assistance of a number of teachers and officers connected with the various institutions described. Part I of this monograph deals with the origin, history, and present organization of the University of the State of New York, which is an executive and not a teaching body, and hence unlike any other American educational institution. This part has been prepared by Professor Sherwood in person, whose official connection with a university and whose careful and scholarly methods well fit him for the task. After the University itself has been described, come a series of chapters dealing with the institutions comprised within it. These chapters have been prepared generally by persons connected with those institutions. A chapter is devoted also to women's colleges, one to professional and technical schools, while an appendix containing an account of the original development of the common schools, by Dr. Andrew S. Draper, is added.

Very respectfully, your obedient servant,

W. T. HARRIS,
Commissioner.

Hon. E. A. HITCHCOCK,
Secretary of the Interior.

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PREFACE.

This report is not designed as a complete, detailed history of education in New York State, for that would have made the work excessively voluminous. The aim is rather to point out the most important features of the educational development of the State and upon these to lay the larger emphasis. Accordingly the primary-school system has been for the most part excluded from consideration, an exclusion easy of accomplishment owing to the earlier establishment in New York of the administrative system of higher education and to the fact that the "common-school" system, when established, was placed under a separate administrative control.

The peculiar dual administration of education in New York is one of its distinctive characteristics. The historic "University of the State of New York" was founded in 1784, immediately upon the achievement of independence from Great Britain. It was in reality the State bureau of education, although in form a private corporation. While it was thus an administrative arm of the State government, it included at the same time within its corporate existence all the chartered teaching institutions of the State of academic and collegiate grade.

The common-school system of New York was put on a permanent basis by the establishment of the State department of public instruction in 1854. This, however, was not the beginning of a system of primary schools, but rather the culmination of a long historic progress, having its origin in the order of the States-General of Holland in 1621, that a tax should be laid upon the inhabitants and householders of New Netherland for the support of a school. The development of the system from this germ until the final adoption in 1867 of the principle of schools absolutely free to all and supported by general taxation is outlined in an admirable address delivered before the New York State Teachers' Association in 1890 by Dr. Andrew S. Draper, then superintendent of public instruction in the State of New York.[1] The influence of the English colonial administration was toward ecclesiastical control of education and unfavorable to the promotion of popular primary schools.

A new current toward State control and popular education came

[1] See appendix where this address is reprinted.

from France in the second half of the eighteenth century, and prevented ecclesiastical and aristocratic dominance in the establishment of the "university" in 1784 and 1787. The regents of the university became themselves interested in popular education, and upon their initiative "An act for the encouragement of schools" was passed in 1795, which appropriated $100,000 a year for five years for the purpose of establishing common schools. The law required each township (called "town" in New York) to raise by tax half as much as it received from the State. The act also provided for elective town commissioners of schools and for the organization of school districts with elective trustees. This system of town supervision was continued till 1856. The general supervision was not put in the hands of the university, and in fact there was no State supervision until 1812, when a law provided for the appointment of a State superintendent of common schools. From 1821 to 1854 the duties of this office were attached to the office of the secretary of state, and since that time have devolved upon the State superintendent of public instruction. There has been supervision also since 1841 by county commissioners, except during the interim 1847–1856, and by city officers since 1851. In a word, the common schools of New York have had a separate development from the schools of higher grade, and the separate ideas prevailing from the beginning in regard to the relation of the State toward these two grades of education have resulted in the establishment of two distinct organizations for the administration of the two grades.

Our concern is with the higher education. The "university" is not a teaching institution. It is a branch of the State administration—in fact, a State bureau of education, but with certain large legislative powers. It is also, in another aspect, the aggregate of the teaching institutions of secondary and higher grade. This unique character of the university is one of the chief points of interest in the educational history of the State, and it has accordingly been described in considerable detail. A much mooted question has been as to the part which Alexander Hamilton played in the founding of the university. Tradition has long made him the father of this educational system. The writer has tried to reach the real truth of this matter, and thinks he has established the fact that Hamilton had a large share in the final shaping of the system so far as the provisions for university or college education in New York City are concerned, but that the provisions for academies and colleges throughout the State—the care of local educational interests—are chiefly due to Ezra L'Hommedieu. It is clear, moreover, that in the original university law of May, 1784, with the supplementary act of November in the same year, there is no appearance of the activity of either of these rival parents of the university. In the definitive reorganization of 1787 they were both active and leaders in the attempt to secure the passage of rival bills. This rivalry ended in compromise, and it can not be truthfully claimed

that either Hamilton or L'Hommedieu was the author of the educational system, which took on many of its permanent features in the earlier legislation with which neither of these men was connected.

Another interesting feature of the system is the influence of European ideas. The revolt against clerical control of education, which was so marked a feature of the liberal movement in France in the second half of the eighteenth century, and with which were associated the ideas of State control and of the centralization of the educational system, was enacted into the New York university law of 1787.

The development of higher education in New York is notable for the lack of any university or college of really dominating control or prominence throughout the State, such as Harvard, Yale, and Princeton in the neighboring States. Had it not been for the simultaneous growth of Cornell University during these later years, Columbia might now hold such a position, but her rejuvenescence came too late to secure unrivaled leadership. There was, however, in the earlier years a marked excellence in several of the smaller colleges. The earlier half of the history of Union College would honor any country in the world, and in the number of able and distinguished graduates Hamilton College holds an enviable place.

In some respects the achievements of the university have fallen below its promise. Unfortunately the movement for common schools developed independently, and, as elsewhere in the New World, the vital interest of the people was in primary education. If the control of the common schools had been committed to the regents, there can be little doubt that a symmetrical system of education from the lowest to the highest grades, with unified administration and oversight, would have resulted early in the century; that a quicker life would have been infused into the higher education, and that much of the damning influence of "politics" would have been kept out of the common-school system. The regents serve without pay, and are appointed by the legislature in the same manner as the Senators of the United States. The board has in consequence been always composed of men of the highest character and attainment, while the rôle played by politics has been exceedingly small. The board began under the first law with the actual control of the internal affairs of the colleges. They were really trustees for all the educational institutions in the university. The law of 1787 gave to the separate colleges their own trustees and their autonomy, while leaving to the regents the power of granting new charters, of oversight, and of directing the general educational policy. The most justifiable charge against the conduct of the regents is that of apathy. It was not until recent times that they fully appreciated the possibilities of the power they possessed or were seized with real ambition to use it. This was due, in my opinion, chiefly to the fact already spoken of, that the time was not ripe for large and vigorous activity in the organization of higher education.

Cut off as they were from the strong undercurrents of the educational movement that resulted in the common-school system, they were simply forced to wait till the need for a comprehensive organization of higher education became imperative. With the growth of true university teaching in America this great State system of higher education has awakened to the activities for which it was designed. The university, however, accomplished many important things. It began the agitation for common schools which resulted in the law of 1795. In 1833 it arranged for teachers' classes in academies, which was one of the earliest attempts toward normal schools in this country.

In the granting of charters to academies and colleges the regents have endeavored to set a high standard of attainment and financial equipment and to thwart attempts to obtain special legislative charters by weak institutions. In 1864 they instituted general examination in the academies as a basis for the apportionment of State funds. This system has steadily raised the standard of work in the academies and brought it nearer to uniformity. The yearly reports of the regents to the legislature are comprehensive and detailed statistics of all the colleges and academies in the State, and have done much to keep up the standard of equipment and work in the teaching institutions. Since 1863 an annual educational convention, called the "convocation," has been held at Albany, in which the teaching institutions of the university are represented, in which educational topics are discussed and policies formulated. The regents have likewise inaugurated a system of university-extension lectures and of local and traveling libraries, which bring wider educational facilities within reach of many people unable to attend an academy or college. In their care of the State library and of the State Museum of Natural History, as well as in certain scientific inquiries undertaken by them, the regents have performed valuable services for the State. One of the most notable, as well as latest, achievements of the university has been the enforcement of high standards of professional training. This has been effected not only by their power of regulation of the terms upon which charters shall be given to institutions and upon which degrees shall be conferred, but also by the prescribing of examinations which candidates for the right to practice law and medicine must pass. In this they are leading conspicuously in a much-needed reform. There has always been jealousy on the part of some of the teaching institutions of the large powers of regulation and oversight in the hands of the regents, but wisdom on the part of the regents and attention to their own particular needs by the colleges have prevented serious clashing "in the open." There has likewise been friction at times between the two branches of educational administration—the university and the department of public instruction—and at times the life of the university has been in danger. It is not unnatural that certain elements in the political life of the State should want to bring

the higher educational system under more direct political influence, and the department of public instruction has been at times willing to absorb the functions of the university. These difficulties have, however, lately tended to disappear, and a powerful movement is on foot which promises to bring organic harmony into the whole educational system of the State.

The sketches of the various colleges and universities comprised in the university have been in most instances prepared under the authorization of the institutions themselves. No attempt has been made to give the history of the academies, and, unfortunately, it is not possible here to give an adequate account of the admirable work accomplished by these institutions of secondary education. Not merely the incorporated academies upon private foundation, but the high schools and the academic departments of union schools have furnished excellent opportunities throughout the State for the work preliminary to the college.

It has likewise not been feasible to attempt in this volume an account of the multitude of special institutions in law, medicine, theology, and in the mechanic and technical arts which have carried on their work, many of them in the front rank of institutions of their class. A list of such institutions will be found in a special chapter.

There is another class of institutions which the writer has ignored—popular colleges, such as Chautauqua University, Cooper Institute, and the like. These are listed in a special chapter, with references to their bibliography.

If exception be made of the unique administrative organization of higher education in New York—the university itself—it may perhaps be said that the greatest contributions of the State to education are in the field of the common schools rather than of higher education. I refer in this connection to the enthusiastic, but not greatly exaggerated, summary of the work of New York in primary-school education in Superintendent Draper's address.[1]

The present activity of the university is well described in the following official statement:

UNIVERSITY OF THE STATE OF NEW YORK.

Object.—The object of the university as defined by law is to encourage and promote education in advance of the common elementary branches. Its field includes not only the work of academies, colleges, universities, professional and technical schools, but also educational work connected with libraries, museums, university-extension courses, and similar agencies.

The university is a supervisory and administrative, not a teaching

[1] See Appendix.

institution. It is a State department and at the same time a federation of more than 800 institutions of higher and secondary education.

Government.—The university is governed and all its corporate powers exercised by 19 elective regents and by the governor, lieutenant-governor, secretary of state, and superintendent of public instruction, who are ex officio regents. Regents are elected in the same manner as United States Senators; they are unsalaried, and are the only public officers in New York chosen for life.

The elective officers are a chancellor and a vice-chancellor, who serve without salary, and a secretary. The secretary is the executive and financial officer, is under official bonds for $10,000, is responsible for the safe-keeping and proper use of the university seal and of the books, records, and other property in charge of the regents, and for the proper administration and discipline of its various offices and departments.

Powers and duties.—Besides many other important powers and duties, the regents have power to incorporate and to alter or revoke the charters of universities, colleges, academies, libraries, museums, or other educational institutions; to distribute to them funds granted by the State for their use; to inspect their workings and require annual reports under oath of their presiding officers; to establish examinations as to attainments in learning, and confer on successful candidates suitable certificates, diplomas, and degrees, and to confer honorary degrees.

They apportion annually an academic fund of about $250,000, part for buying books and apparatus for academies and high schools raising an equal amount for the same purpose, $100 to each nonsectarian secondary school in good standing, and the remainder on the basis of attendance and the results of instruction as shown by satisfactory completion of prescribed courses for which the regents' examinations afford the official test. The regents also expend annually $25,000 for the benefit of free public libraries.

Regents' meetings.—The annual meeting is held the third Thursday in December, and other meetings are held as often as business requires. An executive committee of nine regents is elected at the annual meeting to act for the board in the intervals between its meetings, except that it can not grant, alter, suspend, or revoke charters or grant honorary degrees.

Convocation.—The university convocation of the regents and the officers of institutions in the university, for consideration of subjects of mutual interest, has been held annually since 1863 in the senate chamber in Albany. It meets Monday, Tuesday, and Wednesday after the fourth Friday in June.

Though primarily a New York meeting, nearly all questions discussed are of equal interest outside the State. Its reputation as one of the important higher educational meetings of the country has in the

past few years drawn to it many eminent educators not residents of New York, who are most cordially welcomed and share fully in all discussions. It elects each year a council of five to represent it in intervals between meetings. Its proceedings, issued annually, are of great value in all educational libraries.

DEPARTMENTS.

1. Administrative (regents' office).—Including incorporation, supervision, inspection, reports, legislation, finances, and all other work not assigned to another department.

Duplicate division.—This is a State clearing house, to which any institution in the university may send books or apparatus which it no longer requires, and select from it in return an equal value suited to its locality and needs.

2. Examination.—Including preacademic, law, medical, dental, and veterinary student; academic, higher, law, medical, dental, veterinary, library, extension, and any other examinations conducted by the regents, and also credentials or degrees conferred on examination.

The examinations are conducted as the best lever for securing better work from teachers and more systematic and continuous study from students, and as the best means of detecting and eliminating inefficient teachers or methods. They cover 140 subjects, and required last year 1,045,950 question papers (exclusive of bound volumes), and are held the week ending the last Friday in January and March and the third Friday in June, in the 602 academies and high schools in the university and also at various central points where there are 10 or more candidates.

3. Extension.—Including summer, vacation, evening, and correspondence schools and other forms of extension teaching, lecture courses, study clubs, reading circles, and other agencies for the promotion and wider extension of opportunities and facilities for education, specially for those unable to attend the usual teaching institutions.

Public libraries division.—To promote the general library interests of the State, which through it apportions and expends $25,000 a year for the benefit of free public libraries. Under its charge are the traveling libraries for lending to local libraries or to communities not yet having permanent libraries.

The most important factor of the extension movement is provision of the best reading for all citizens by means of traveling, home, and capitol libraries, and annotated lists through the public libraries division.

4. State library.—Including general, law, medical, and education libraries, library school, bibliographic publications, lending books to students, and similar library interests.

Library school.—The law authorizes the State library to give instruction and assistance in organizing and administering libraries. Students receive from the State library staff, in return for services rendered to the library during their two years' course, careful training in library economy, bibliography, cataloguing, classification, and other duties of professional librarianship.

5. State museum.—Including all scientific specimens and collections, works of art, objects of historic interest, and similar property appropriate to a general museum, if owned by the State and not placed in other custody by a specific law; also the research department, carried on by the State geologist and paleontologist, botanist, and entomologist, and all similar scientific interests of the university."

SIDNEY SHERWOOD,
Johns Hopkins University.

PART I.

UNIVERSITY OF THE STATE OF NEW YORK; ORIGIN, HISTORY, AND PRESENT ORGANIZATION.[1]

By SIDNEY SHERWOOD, Ph. D., Associate Professor of Political Economy, Johns Hopkins University.

INTRODUCTION.

The system of higher education in New York is one of great interest to the students of State educational institutions. It has the interest of age and of historic incident, for it is closely connected with the whole development of the State. The distinguished men who aided in founding it, and their distinguished successors in its control, give to its history that interest which springs from association with conspicuous personality. But it is the greatness of the work achieved by this system in the development of the educational life of the State which chiefly entitles it to be studied. And yet the boundaries of the Commonwealth do not bound the historic or the practical importance of the university.

The American colonies were profoundly influenced during the latter half of the eighteenth century by the new educational ideas with which revolutionary France conquered the nineteenth century. The New York system shows abundant traces of this influence, and itself has become a source of an influence which has spread to the Pacific on the one hand and back to Europe on the other.

[1] ABBREVIATIONS.

New York (State)—University. Regents' report.	Reg. rep't [followed by number of report and year in parentheses; e. g., Reg. rep't, 102 (1889)].
New York (State)—University. Proceedings of the university convocation.	Conv. proc.
New York (State)—University. Historical and statistical record, by F. B. Hough.	Hist. record.
New York (State)—Public instruction, superintendent of. Annual reports.	Sup't's rep't [followed by number of report and year in parentheses].
New York legislative papers.	N. Y. leg. papers.

New York a leader in innovation.—New York has always been a leader among the States in the practical methods and organization of progressive change, whether in politics, in finance, in commerce, in law, or in education. The commercial adroitness and activity of the city were strongly marked even under the Dutch régime. The plan for securing paper money issues by national banks was carried to Washington by Secretary Chase, from New York, where it had been in operation for a quarter of a century. Nearly every movement toward the organization of a new political party in the United States has had its source and center in New York. From Aaron Burr to the present time New York has been the pivot around which revolved the political destiny of aspirants to high office in the nation. Nowhere else has the spoils system in politics, this nineteenth century survival of the old Teutonic comitatus, received so splendid an illustration of its efficiency as a machine for party control as in New York.

Not even to Massachusetts does New York yield place in the number and value of her legal reforms, whether in substantive law or in procedure. In the abolition of feudal tenures, of the old cumbersome methods of conveyance of real property, and in the simplification of pleadings and procedure New York has led the way. But these are only instances. Within thirty years England has introduced two most beneficent innovations in her law, viz, the abolition of separate chancery courts and of the disabilities of married women in regard to the ownership of property and the conduct of business. New York anticipated England more than twenty years in these reforms. In the codification of law, also, New York has given the impulse which is gradually transforming the legal systems of this country.

"Innovation," says Henry Adams, speaking of the early years of this century, "was the most useful purpose which New York could serve in human interest, and never was a city better fitted for its work."[1]

Plan and scope of the work.—The commercial and political importance of the city tends to overshadow the achievements of the Commonwealth in other fields of activity. The University of the State of New York is an innovation in educational organization which deserves to be better known. It is the aim of the writer to make this system better known. He has attempted, by a careful outline of the organization and work of this university, to show what this State is doing for the higher education of its people, and what has been the influence of its system and its activity upon the progress of higher education in other States and countries. The University of the State of New York, comprising, as it does, all the chartered colleges and secondary schools in the State, is an institution unique in its organization and in its methods of work. The writer believes that he has thrown new light upon the beginning of the university and has shown

[1] Adams, Henry B. History of the United States of America, v. 1, p. 112.

its international origin. It was but one result of a great movement in educational reform which in the latter part of the eighteenth century swept over continental Europe and America. He has at the same time pointed out the particular causes which led New York to work out her peculiar system, a system admirably adapted to the needs of the State, and a model which has suggested many reforms beyond the boundaries of the Commonwealth. The Empire State has no prouder or juster claim to greatness than her imperial university.

The period from the organization of the university (1784–87) until the beginning of its later increased activity with the law of 1889 has been very hurriedly passed over. This period has been treated fully and ably in a publication prepared under the auspices of the regents of the university, at the time of their centennial celebration in 1884[1]—a work to which the writer is greatly indebted for its valuable collections of facts and the suggestiveness of its historical comments. The later activity of the university has been more fully treated in this monograph. The revision and codification of the laws relating to the university in 1889, and the extension of its powers thereunder, as well as the present plans and prospects of the university, have been carefully studied by the writer, who has made some suggestions as to a further extension of the work of higher education by the university.

In April, 1892, a new university law was enacted, the purpose of which was to revise and consolidate the laws relating to the university. It has also revised the general legislation relating to the colleges. It thus covers a wider field than the law of 1889, and might well be called a "code of higher education."

It repeals the most of former laws relating to higher education. It stands thus as the compact embodiment of that historic evolution which the writer has attempted to trace in this narrative. As such it has seemed best to print it in full as an appendix. This volume thus serves as an historic introduction to the law of 1892, which must be the starting point of all new developments. The structure, powers, and methods of the university itself remain substantially unaltered. The analysis of the law of 1889 which the writer has given will therefore be intelligible to the reader of the law of 1892, and will in turn help to make clear the scope and meaning of the latest law. There are two features in the law of 1892 which clearly show the newer spirit of progress in this old historic university. One is the remarkable emphasis given to libraries as an agency in higher education; the other is the incorporation of university extension as a regular and permanent department of the university work.

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[1] N. Y. (State)—University. Historical and statistical record, 1784–1884, by Franklin B. Hough; with an introductory sketch by David Murray. Ph. D., LL. D., secretary of the regents, Albany, 1885.

CHAPTER 1.

OUTLINE OF THE PRESENT SYSTEM OF EDUCATION IN NEW YORK.

New York has a system of education which is complex and without theoretic unity—a system, in fact, without system. In its practical working, however, there is a real unity. Like the English constitution it is the result of historic growth, and the practical gifts of the people have made possible the harmonious, efficient management of what would seem like an ill-contrived machine, were it the contrivance of a single mind or a single legislature.

Private schools.—The State exercises no monopoly of education. While every college, academy, and private school is in a very important sense a State institution, yet there has always existed complete freedom of instruction. Splendid work has been done by a multitude of unchartered institutions, unaided by public money, subject to no visitation or control by public authority. It is, however, a settled policy of the State that all chartered institutions of learning shall be considered as parts of the State system, and while allowed virtually complete self-government in internal administration, shall yet be held accountable to the State for the proper performance of their duties. With the strictly private schools the present inquiry has no concern.

State educational systems.—There are two distinct, coordinated systems of public education in New York, occupying different fields, organized upon different plans, working in great part without reference to each other, and yet in a few points vitally connected. It will be seen later on how this anomalous dual system originated. At present a clear statement of the constitution and scope of each is needed to render plain the lines of this historic inquiry.

1. Department of Public Instruction, or Common-School System.

For purposes of primary instruction the State is divided into 112[1] school-commissioner districts. All cities except Kingston are excluded from this division. These districts are subdivided into school districts, the number varying according to the needs of each locality.

The cities, with the above exception, and a few incorporated villages have school organizations established by special statutes, under the supervision of local superintendents.[2]

School districts.—The school district is the smallest territorial division of the State. The qualified voters of the school district elect at district meetings one or three trustees, who are the "local executive officers empowered to carry out the mandates of the district meetings." They have to report annually to the district meeting and to the school

[1] In 1884.

[2] Sup't's rep't, 30th (1884), p. 5.

commissioners. The district meeting elects a clerk, collector, and a librarian. This system secures thus the most minute local self-government in the matter of the primary schools.

Union free school districts.—Under a general law passed in 1853 school districts are authorized to combine into "union free school districts" and to establish graded schools, to be maintained by a general tax. These schools are under the management of elective boards of education with similar powers to those of district trustees. They report to the school commissioners. This plan has been generally adopted in villages, thereby securing a higher grade of education. These union free schools are important as being the main point of contact between the two systems of public instruction.

School commissioners.—The electors of each school commissioner's district elect triennially, at a general election, a school commissioner. This officer lays out and regulates the boundaries between school districts, apportions the public money allotted to his district by the State superintendent, and in general exercises a constant and minute supervision over all matters relating to the school districts within his jurisdiction. School commissioners have advisory powers with school district trustees and in some few matters compulsory powers. They examine and license teachers within their districts, and examine and recommend candidates for appointment as students in the normal schools. They are required to make annual reports to the State superintendent "containing a complete abstract of all the material facts, statistical and financial, required and[1] contained in all the trustees' reports to the commissioners," as well as observations and suggestions on their own part or in response to special inquiries from the superintendent.

City public schools.—"The city public schools and those in some of the incorporated villages having a population of not less than 5,000 are managed by local boards of education under special statutes." In some cities and villages these schools are under the supervision, not of school commissioners, but of special local superintendents, who report both to the local boards and to the State superintendent.

State superintendent of public instruction.—This educational division and organization of the State has no vital relation to the political system of the county and township subdivision. Territorially and personally this educational system is independent and complete in itself. The minute local self-government in the school districts is counterbalanced by the centralization of power in the State superintendent of public instruction. This State officer is intrusted with powers of a character almost autocratic. He is elected by the joint ballots of the senate and assembly, and holds office for three years. This office has existed since 1854, when the department of public

[1] Sup't's rep't, 30th (1884), p. 8.

instruction was organized upon its present basis.[1] Besides appointing the working force in his own bureau, "he makes appointments of State pupils to the institution for the instruction of the deaf and dumb and the blind, upon the certificates of the proper local officers, . . . and has charge of all the Indian schools upon the several Indian reservations[2] and appoints their superintendents. He apportions and distributes the public money appropriated by the legislature for the support of schools," amounting to more than $4,000,000 annually. "He compiles the abstracts of the reports from all the school districts in the State reported to him by the school commissioners, and the matters reported to him by city superintendents, boards of education of incorporated villages organized by special statutes providing for local supervision, and reports annually to the legislature."

He has general supervision over all the agencies for the training of teachers. The system for the training of public school teachers is, in theory, a complete one. There are:

Uniform examinations.	Academic teachers classes.
Teachers' institutes.	Normal schools.[3]

Uniform examinations for teachers' certificates.—While teachers' licenses are issued upon examination by school commissioners and other local officers, such licenses are valid only within the district of such examining officer. State certificates are issued only upon examinations conducted by examiners appointed by the State superintendent, who also, "with the assistance of the regular corps of institute instructors, prepares the examination questions to be used in such examinations."[4] He also regulates the grades of the certificates issued by school commissioners.

Teachers' institutes.—These popular training classes are held annually in each school commission district and are attended by a total of about 20,000 teachers. The usual length of the session is one week. The State superintendent has the control of these institutes, appointing the regular and special instructors and directing the work.

Teachers' classes in academies.—The act above referred to, which authorized the consolidation of several school districts into "union free school districts," also authorized the establishment in these union schools of "academic departments." These academic departments were regarded as of equal grade with the academies which were under the supervision of the university, and hence, being a part of the system

[1] Laws of 1854, ch. 97. Sup't's rep't, 30th (1884), pp. 5–58. Sup't's rep't, 32d (1886), pp. 5–72. These two reports taken together give a valuable account of the organization and working of the department of public instruction.

[2] Sup't's rep't, 30th (1884), p. 11.

[3] There is also in New York City a "College for the training of teachers," but this is a part of the university and is connected only with higher education.

[4] Sup't's rep't, 32d (1886), p. 9.

of secondary instruction, were made subject to the visitation and control, not of the State superintendent, but of the regents of the university. In 1834 the regents were authorized to establish in the academies classes for the training of teachers, which classes have been maintained ever since in academies, and also since 1877 in the academic departments of union schools. In 1888 there were 3,258 pupils in these classes who attended over ten weeks, and 2,676 who completed the full course of sixteen weeks. They are regarded as "about the only instrumentality for training teachers for our ungraded schools."[1]

By a law passed April 15, 1889,[2] "the powers and duties conferred and imposed upon the regents of the university by 'previous acts' relative to the instruction of classes in academies and union schools in the science and practice of common-school teaching are hereby transferred to the superintendent of public instruction." This law was the result of some deliberation on the part of the regents and the association of academic principals, and was passed upon being recommended by the regents in their report to the legislature.[3] Its object was to bring under a single management all the instrumentalities for the preparation of common-school teachers. This transfer included the management of the annual appropriation of $30,000 for maintaining the teachers' classes. In 1890 the annual appropriation was increased to $60,000.[4]

Normal schools.—There are now 11 of these State schools. The oldest of these, the Albany State normal school, was founded in 1844, and placed under the joint management of the superintendent of common schools (since 1854, the superintendent of public instruction) and the regents of the university. "The local management of the latter school (the Albany State normal school) is vested in an executive committee consisting of five members, of whom the State superintendent is one, and the other four are appointed by the joint action of the State superintendent and the regents of the university."[5] On March 13, 1890, the regents made this school "the New York State Normal College," and its work has been reorganized upon a higher basis, instructing only advanced pupils and being exclusively a normal training school,[6] whose graduates receive the degree of bachelor of pedagogy.

The other ten State normal schools are entirely under the direction of the State superintendent. They are governed by local boards appointed by him, and he also appoints the teachers in these schools upon nomination by the local boards. The normal schools, besides

[1] Reg. rep't, 102 (1889), p. 821.

[2] Laws of 1889, ch. 137.

[3] Reg. rep't, 103 (1889), p. 27, 268.

[4] Laws of 1890, ch. 170.

[5] Sup't's rep't, 32d (1886), p. 7.

[6] Draper, Andrew S. Origin and development of the New York common school system.—An address delivered before the New York State Teachers' Association at Saratoga Springs, July 8, 1890.

the normal departments in which the technical training of teachers is carried on, undertake also a general instruction of an academic character, which has been rather a hindrance than a benefit to the development of the normal training. The State superintendent "appoints, on the recommendation of school commissioners and city superintendents of schools, the pupils in the normal department of the several State normal schools, subject to a preliminary entrance examination by the faculties of such schools."[1]

These schools report to the State superintendent, and each local board is "subject to his general supervision and direction in all things pertaining to the school."

This hurried sketch of the chief powers of the superintendent of public instruction shows a remarkable centralization in the hands of the single head of the State department of public instruction. While school trustees, school commissioners, city superintendents, and boards of education are elective and local taxation is voted in the various districts, yet all these local officers are under the supervision of the State superintendent and the State money is distributed by him. To these executive powers are added an extraordinary judicial power which makes the centralizing tendency effective and complete.

Judicial powers of the State superintendent of public instruction.— The State superintendent is the final arbiter in all disputes concerning school matters. Not only has he an advisory power which is systematically and laboriously exercised "through the medium of correspondence by mail, or through oral conferences between the superintendent or his deputy and school officers, teachers, parents, and others coming to the department from various parts of the State,"[2] but he acts as a court of final appeal with power to enforce his decision. "Any person feeling himself aggrieved in consequence of any decision made" by school district meetings, school commissioners, supervisors, district trustees, and other officers in regard to any matter under the school laws "may appeal to the superintendent of public instruction." Thus the very sanctum of local self-government, the district meeting, is invaded by the central authority of the State. The superintendent in this capacity establishes rules of practice, issues injunctions, and makes all necessary orders. Councils are heard before him. The questions involved on their appeal touch all branches of the civil law, of the State constitutional law, real estate law, the law of contracts, the law of wills, and the like. Hence there is conferred upon the superintendent an appellate judicial authority coordinate with that of the court of appeals in some respects, for the law declares that "his decision shall be final and conclusive, and not subject to question or review in any place or court whatever."[3]

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[1] Sup't's rep't, 32d (1886), p. 7. [2] Ibid. pp. 12–13. [3] Laws of 1864.

And this despotic judicial authority has the amplest means of enforcing its decisions. The superintendent has—

"First, the power to compel the assessment and collection of taxes in a school district to pay proper demands against the district. Second, the power to remove from office any school trustee, or member of a board of education of a union free school district, or other school officer, for any willful violation or neglect of duty under the school statutes, or for willfully disobeying any decision, order, or regulation of the superintendent."[1] This extreme centralization in the system of primary instruction has worked undeniably well. However democratic in her political philosophy New York may be, the history of her common schools as well as of her university shows that she has imperialist instincts. The Empire State is not a mere name of fancy.[2]

Superintendent of public instruction and the university.—It has already been seen how in the control of the "New York State normal college," and of the academic departments of union free schools, the department of public instruction and the university are brought into direct and organic cooperation. There are other points of contact between the systems of higher and of primary instruction. The State superintendent is, ex officio, a regent of the university, a trustee of Cornell University and of Syracuse University.

2. The University of the State of New York, or the System of Higher Education.

University act of 1889.—In the year 1889[3] the legislature of New York passed a law entitled "An act to revise and consolidate the laws relating to the university of the State of New York."

This act in the words of the regents[4] "consolidates 50 pages of laws which have grown up during the past century pertaining to the regents' department, into a single clear law of only 7 pages. Besides codifying the old laws, the new act has defined and enlarged the powers of the university, and has put new safeguards and restrictions on the exercise of those powers." An analysis of this law will give

[1] Sup't's rep't, 32d (1886), p. 13.

[2] The policy of State support and State control of the common school system has been on the whole very efficient. The address of Superintendent Draper, above referred to, contains an admirable statement of what has been done by New York in these matters. In the year 1889–90 over $17,000,000 were raised by State and local taxation for the common schools. Local authorities can exercise the right of eminent domain in the acquisition of school sites. State supervision began in 1812, when the office of "State superintendent of common schools" was created. From 1821 to 1854 the secretary of state performed the duties of this office. Supervision by district or county officers has existed from 1841 to the present time, excepting the years between 1847 and 1856. From 1795 till 1856 there was also supervision by township officers.

[3] Laws of 1889, ch. 529.

[4] Reg. rep't, 103 (1889), p. 30.

the best understanding of the organization and work of the university. It is difficult to place this university in any known category of institutions. In its origin it had the form of an English educational corporation; but upon it were ingrafted the powers and functions of a modern State department of education. It was the first successful realization, in practical form, of the plans of the French parliamentarians and encyclopedists for a system of education unified and harmonized under State control. It was not a full realization. It was at first a rude machine. But it worked, and a century of use and improvement has perfected it. Its original character it still retains. It is in form a private corporation, but with no private privileges. Its private activities are for public ends. Its duties and responsibilities are chiefly those of a bureau of State administration. It is a State department of higher education, organized under the form of a private corporation.

The university in form a private corporation.—"The university shall consist of all the institutions of academic and higher education which are now or may hereafter be incorporated in this State, together with the State library and State museum, and such other libraries, museums or other institutions for higher education as may, in conformity with the ordinances of the regents, after official inspection, be admitted to the university."[1]

From this section of the university act it might seem that the university was simply a system of federated colleges like Oxford or Cambridge, with the colleges, however, scattered throughout the State instead of being collected in the same town. It is the relation of the system to the State which makes the vital difference. The whole vast system is constituted an arm of State government. Besides the State library and State museum, there are in the university 649 institutions.[2] These are 549 academies, high schools, and academic departments, and 100 colleges and professional schools, viz, 22 colleges of arts and science for men, 6 for women, and 4 for men and women, 7 law schools, 15 medical schools, 13 theological schools, 4 schools of pedagogy, and 29 other institutions. The last item includes schools of technology, pharmacy, dentistry, music, etc.

The term "college" is defined in the act to "include all institutions of higher education which are authorized to confer degrees," and the term "academy" to "include high schools, academic departments of union schools, and all other schools for higher education which are not authorized to confer degrees." The university therefore embraces all incorporated institutions for higher and secondary instruction in the State. The department of public instruction, on the other hand, embraces in its system all schools for primary instruction and for the technical training of primary school teachers.

The original corporate name of the university was "The Regents of

[1] Laws of 1889, chapter 529. [2] Status June 30, 1896.

the University of the State of New York." The act of 1889 changed this name to "University of the State of New York" and conferred upon the university the usual general powers of a corporation.

The government of the university is vested in 19 elective regents, and the governor, lieutenant-governor, secretary of state, and superintendent of public instruction, who are regents ex officio. The regents elect their own officers, a chancellor, a vice-chancellor, who serve without salary, and a secretary, who is also the "financial officer of the university." The colleges and academies composing the university have no representation in the governing board. Indeed, it is provided that "no person shall be at the same time a regent of the university and a trustee, president, principal, or any other officer of any institution belonging to the university."[1]

The government of the university is imperial, not federative. This differentiates it at once and completely from the English universities. A truer English analogy would be in the government which Great Britain exercises over her colonies. They are parts of the Empire. They govern themselves, but they have no voice in the government of the whole.

The university has many of the powers of an ordinary educational corporation. The regents are authorized to confer honorary degrees, to establish examinations and grant diplomas and degrees thereon, and "to maintain lectures connected with higher education." They "have power to adopt all needed resolutions, rules, by-laws, and ordinances for the accomplishment of the trusts reposed in them." They may hold and buy, or sell, both lands and chattels. All their corporate powers are, however, public trusts.

The university in fact a State bureau of higher education.—The object of the university is declared to be "to encourage and promote academic and higher education by means of the several institutions composing the university, to visit and inspect the same, to distribute to them such funds as the State may appropriate for their use, and to perform such other duties as may be intrusted to it."

The regents have entire control of the State library and the State museum. They are charged with the "preparation, publication, and distribution" of various State publications and with the apportionment of public money to the academies. They are required "to establish in the academies of the university examinations in such studies as the regents shall prescribe as furnishing a suitable standard of

[1] This provision is violated by the fact that the governor and lieutenant-governor of the State and the superintendent of public instruction are made ex officio members at once of the board of regents and of the board of trustees of Cornell University, although the old law is not so stringent in its wording as the above. The real intent of the law is not violated, which was to exclude private influence of particular colleges. A State officer might well be expected to look at matters from the State and not the college standpoint. (Amended subsequently, prohibiting such officer from becoming an elective regent.)

graduation from the academies, and of admission to the colleges of the State," and they have organized among the academies a far more extensive system of examinations than they are required to maintain.

Medical students, unless college graduates, must take a regents' examination before beginning study at a medical school.[1] The same rule holds in case of law students. The regents are further required to appoint boards of examiners in medicine to examine candidates for a State license to practice medicine.

It is specially in the field of academic examinations that the regents have advanced the interests of higher education during the last thirty years.

The supervisory powers of the university are vast and stringent.

"The regents shall, by themselves or their committees or officers, have full power to examine into the condition and operations of every institution in the university, and shall inspect the same, and require of each an annual report, verified by the oath of its presiding officer and including such particulars as may be prescribed by the regents, who shall annually report to the legislature on all departments of the university." Thus, while the various colleges and academies have no voice in the management of the university, the university has absolute power, in the name of the State, to inspect and to report to the legislature on all the affairs of these institutions.

It is, however, in regard to the incorporation of colleges and academies that the public character of the university is most clearly seen. The regents have power to "incorporate any college, academy, library, museum, or other educational institution under such name, with such number of trustees or other managers, and with such powers and privileges, and subject to such limitations and restrictions, in all respects, as may be prescribed by the said regents in conformity to the laws of this State." The regents may also suspend the charter of any institution for failure to report or other violation of law. Further, "the said regents may at any time for sufficient cause, and by an instrument under their common seal, to be recorded in their office, alter, amend, or repeal the charter of any college, academy, or other institution subject to their visitation."

The university is thus made coordinate with the legislature itself. It would seem that the State had so far abdicated its sovereignty, were the university not in fact a part of the State government.

State control of the university.—The constitution of the board of regents secures its control by the State. The life which vitalizes the corporation is the power of the people in their legislature. It has been seen that the governor of the State, the lieutenant-governor, the secretary of state, and the superintenent of public instruction are regents ex officio. The remaining 19 regents are elective, but there is no cooptative perpetuation in the university. "In the case of

[1] Laws of 1889, chapter 468.

the death, resignation, or removal from the State of any elective regent, his successor shall be chosen by the legislature in the manner provided by law for the election of Senators in Congress, except that the election may take place at any time during the session of the legislature as it may determine."

State control is further insured by the fact that while the officers of the board of regents are elected by the regents, yet "each officer so elected shall, before entering on his duties, take and file with the secretary of state the oath required of State officers."

It is also provided that if any regent absent himself from the meetings for a year without satisfactory excuse the fact shall be reported to the legislature and a new regent elected in his place. The annual report which the regents are obliged to make is another important feature in State control.

It is a master stroke in the policy of State control that the regents are to serve without pay. A regular State department with its salaried officers would be more easily brought under the control of a political party. It was keen political insight which led the authors of this scheme thus to compel into this high service of the State the worthiest talent in the State. None but a citizen of worth and public spirit would accept a position of grave responsibility and important duty when only honor is to be gained. And honor is not certain, for they hold their position at the pleasure of the legislature.

The policy is not a democratic one, but it has proved entirely successful; the legislature has uniformly chosen men of high character and wide reputation. They could have no motive to do otherwise when there were no "spoils" in the office. No suspicion of political corruption has ever touched the activity of the board of regents. They have been men chosen from among the foremost citizens of the State. It is interesting to note that Prussia is adopting in municipal administration this policy of gratuitous service by the citizens, but with this difference, characteristic of the Prussian state, that such service is there compulsory.

It is one merit of this peculiar constitution of the university that to each separate college and academy is left its own charter, with all the stimulus of private gain and ambition, no mean stimulus in a social régime where individualism is the dominant principle of activity, while the work of harmonizing this multitude of virtually independent institutions, of inspecting their action, of promoting plans of improvement, and of bringing the whole into organic relation to the State is performed by a few men whose very acceptance of the office proves their breadth of mind and zeal for the common good.

SUMMARY.

State educational policy.—From the foregoing sketch it has become apparent that in New York the activity of the State is vital in every

department and branch of educational enterprise. The points in the State system which are most noteworthy are these:

1. The State system is not a monopoly. There exists perfect freedom for private educational enterprise, individual or associate, lay or clerical.

2. A public-school system for primary instruction, supported entirely by local or general taxation and State funds, and designed for the free use of all children under compulsory attendance laws. This system is organized upon a special territorial subdivision of the State, distinct in the main from the political subdivision, and all its parts are subordinated to the authority of a single head elected by the legislature—the State superintendent of public instruction. The extraordinary judicial power of final decision upon appeal conferred upon this officer makes the central authority of the State supreme in the regulation of even the smallest affairs and in the remotest home of local self-government. An extensive system of agencies for the training of teachers for the primary schools is also maintained under the control of this department.

3. A system of secondary and higher education in which all colleges and academies having State charters are made parts of a vast corporation called the "University of the State of New York," in the government of which, however, they have no voice. Although for the most part these institutions are private foundations and are maintained by private funds, they are subject absolutely to the visitation of the university, which has the power of life and death over these bodies corporate. The university, in spite of its form as a private corporation, is in fact a State bureau of administration, exercising the sovereign authority of the State over the colleges and academies, while leaving to them the largest liberty for self-government in their internal affairs.

4. In both systems the policy is to secure the largest possible benefit, consistent with State control, from individual initiative and local pride. Of the $17,000,000 paid for common schools in the year 1889–90, $13,000,000 were raised by local taxation, and $4,000,000 only were the product of State taxation and State funds. The highest educational service rendered in the State, viz, the work of the regents, is a service rendered gratuitously. New York is imperial in her educational methods, but the imperialism is half-feudal in its type, voluntary service by the people in return for the paternal supremacy of the State.

CHAPTER 2.

THE FOUNDING OF THE UNIVERSITY.

Higher Education in Colonial Times.

Little was done for the advancement of higher education in the New Netherlands. The policy of the Dutch in the matter of popular schools

for elementary instruction was carried to the New World, and from the very beginning the Dutch settlers took care to provide public primary schools. In 1638 it was proposed, in certain articles for the colonization and trade of the New Netherlands, that "Each householder and inhabitant shall bear such tax and public charge as shall hereafter be considered proper for the maintenance of clergymen, comforters for the sick, schoolmasters, and such like necessary officers."[1] There had been schools even before this. And later, in 1659, "Alexander Carolus Curtius, before a professor in Lithuania," was engaged by the directors of the West India Company and sent out to open a Latin school.[2] The English occupation in 1664, however, put an end to this school, which appears to have been the only academy in New Amsterdam.

Under the English régime Latin schools were encouraged. As during the Dutch rule, licenses from both civil and ecclesiastical authorities were necessary for the establishment of private schools. In 1702 the legislature framed "An act for encouragement of a grammar free school in the city of New York,"[3] but no permanent foundation was made under this act. The act contemplated the establishment of a public school supported by taxation, "for the education and instruction of youth and male children of such parents as are of French and Dutch extraction, as well as of the English." The schoolmaster was to be chosen by the common council of the city, and "lycensed and approved by the Right Hon. the bishop of London, or the governor or commander in chief" of the province. Lord Cornbury, then governor, urged the matter, and the "English society for the propagation of the gospel in foreign parts" became interested in the plan. This society was formed in 1701, and adopted a vigorous missionary policy in the colonies, spurred on by antagonism to the efforts of the Jesuits. Under Governor Dongan the Jesuits had actually established a Latin school in New York in 1688. In educational affairs the aim of this society was to strengthen and extend the influence of the English Church, and the schools of the colony fell virtually under the control of this propagandist corporation. They sent out missionaries and schoolmasters and organized schools throughout the province, which they in part supported. In their attempts to convert the Iroquois, likewise, they showed great zeal.

"The maintenance of a learned and orthodox clergy abroad" was declared to be "the principal," although "not the only intent of this corporation," and their standing orders in regard to schoolmasters show that they believed firmly in the dominance of the established church in education. The ecclesiastical bias, thus intensified in the schools of the colony, is important as helping to explain the controversies of the latter half of the century.

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[1] Pratt's Annals (see Conv. proc. 1868, p. 160).
[2] Ibid., 1869, p. 144.
[3] Ibid., 1868, p. 177.

In 1732 another attempt was made to establish a school under public authority. "An act to encourage a public school in the city of New York for teaching Latin, Greek, and mathematics,"[1] passed in that year, provided for an institution thoroughly civil in its scope and government. The education sought was secular rather than religious. The public good, not the advantage of the church, was the object in view. The school was to be under the visitation of the "justices of the supreme court, the rector of Trinity Church, and the mayor, recorder, and aldermen of the city of New York," who could remove the schoolmaster for cause and appoint a successor. This board of visitation is probably the prototype of the ex officio membership of the board of governors of King's College and of the board of regents. Provision was made for partial public support of the school, and for the instruction, free of tuition, of 20 young men recommended from the different counties by certain public officers in those counties. This last provision shows a remarkable grasp, for that time, of the meaning and functions of a State school. It was the beginning of the policy, consummated in the establishment of the University, of an educational institution which should be identified in its operation with the whole life of the State.

King's College.—The idea of a college seems to have lurked in both these schemes for a public grammar school, namely, the acts of 1702 and of 1732. But it was not till 1746 that public action was really taken in regard to the founding of a college.

In that year the legislature passed "An act for raising the sum of £2,250 by a public lottery, for this colony, for the advancement of learning and toward the founding a college within the same." This was the beginning of King's, afterwards Columbia College. It is not necessary here to tell the story of the founding of King's College. It has been often told, and there is nothing new to add. There was a fierce controversy over the charter. One party desired a royal charter; the other a charter from the colonial legislature. The royalist party prevailed and the charter was granted by King George II in 1754. In this controversy is seen that revolt against absolutism in church and state which was gathering strength both in America and in France at this time. The principles or tendencies of the conservative party were a church foundation aided by the state; an education in which the church standards should be the gauge of truth; the maintenance of the authority of the English King; a corporate organization in which the Church of England should control. It was a party of English sympathies, of aristocratic tendencies, of intuitional and scholastic knowledge, of ecclesiastical supremacy. The other party were learning a new philosophy. They favored knowledge, positive and practical. They wanted freedom and self-government in the church and in the state; and separation of church from state. They wanted an educa-

[1] Pratt's Annals (see Conv. proc. 1869, p. 186).

tion that fitted men for service in the state, that was identified with state life and controlled by the people in their civil capacity. It was the party that later had French sympathies, the popular party moved by the spirit of the American Revolution.

William Livingston, whose influence we shall notice later on, was the life of this popular opposition to the royal charter. The American or popular party won some advantages. Several public officials of the colony were made ex officio members of the board of governors. The ex officio governors of the college were the Archbishop of Canterbury, the first lord commissioner for trade and plantations, the governor and lieutenant-governor of the province, the eldest councillor, the judges of the supreme court of judicature, the secretary and the attorney-general, the speaker of the general assembly, the treasurer, the mayor of New York, the rector of Trinity Church, and one minister of the Reformed Protestant Dutch Church, of the Lutheran Church, of the French Church, and of the Presbyterian Church, respectively, and the president of the college. The charter was, in a measure, a compromise. William Livingston was put on the board of governors. Trinity Church offered land for the site of the college on condition that the president should belong to the Church of England. Livingston and his party opposed this measure and opposed also the giving of public funds to an institution dominated by the church. The opposition succeeded so far that in 1756 the lottery money was divided equally between the college and the city.[1] Work was immediately organized by the Rev. Dr. Samuel Johnson, who came from Connecticut and who had refused the presidency of Franklin's new academy at Philadelphia, which afterwards developed into the University of Pennsylvania. The college was aided financially by the King and "many of the nobility and gentry in the parent country," by the Society for the Propagation of the Gospel in Foreign Parts, and by "several public-spirited gentlemen in America and elsewhere," to quote from an account of the college attributed to its second president, Dr. Myles Cooper.[2] This account continues: "By means of these and other benefactions the governors of the college have been able to extend their plan of education almost as diffusely as any college in Europe."[3] There was also a grammar school annexed to the college. It is thus seen that the European universities had an influence on the development of the curriculum, and the training given by this college fitted some of the ablest men in the colonies for their work in the Revolution and the subsequent political development of the country. The scientific spirit was early awakened, and a medical school was established as early as 1767. The college was broken up by the Revolution and the occupation of New York by the British.

[1] MS. History of Columbia College, by Frank R. Hathaway.

[2] President 1763-1775.

[3] Quoted in Hist. record, p. 119.

New York at the close of the Revolution.—On the 25th day of November, 1783, the British evacuated the city of New York, and the State constitution, adopted in 1777 at Kingston, pushed its jurisdiction to the sea. The population of the State at this time was about a quarter of a million, of whom perhaps one-tenth counted their residence in New York City, while Long Island numbered some 30,000 inhabitants. The rest of the inhabitants were scattered along the whole course of the valley of the Hudson, although from Albany to the Champlain region the settlements were sparse. Westward from Albany, Schenectady was the last important town. No substantial effort had yet been made to people the vast stretch of forest westward and northward from this narrow fringe of the Hudson River Valley. But the expedition of Sullivan had broken the power of the Six Nations, and the State began a liberal policy of land grants which soon started a great wave of white settlement through the fertile Mohawk plain, which had become famous as the home of the Iroquois Federation. But this meant future greatness only. New York was but a middle State in importance, as in position, at the close of the war. New York and Albany were the only large cities. The territory of the State was a wilderness possessed by Indians.

There were no efficient educational institutions. A few private and parish schools, a few academies, King's College, defunct—such was the condition of education in 1783. The State had an aristocracy, but an aristocracy without caste. Cosmopolitan in origin, this aristocracy could not be homogeneous in sentiment. It rested upon birth, upon wealth, upon talent. Dutch and English, Huguenot and German, Welsh and Irish and Scotch were the national strains of blood in the first families. Alexander Hamilton, the Scotch Huguenot from the West Indies, parvenu though he was, had ennobled himself through his genius and conspicuous services. He married into one of the old Dutch families, the Schuylers, and became a leader in society as he was in politics. Intellectually, the chief distinction of New York was in her jurists. The bar of New York, containing, as it did, Hamilton, John Jay, Chancellor Livingston, James Duane, Aaron Burr, Richard Morris, Egbert Benson, and many others little less famous in that day, would yield to no other State its claim to precedence. And these men were trained, by the experience of the Revolution, to deal with all the questions of political organization and government. They established constitutions, framed laws, adapted the old order to new exigencies, were quick in expedients of policy. They were at once lawyers and judges, politicians and statesmen. The lawyers of New York were the leaders in the State, and, as a body, aristocratic in their preferences.

Legislation of 1784.—It was natural that under such circumstances there should be an effort on the part of the leading men to revive the college, and thus provide means of higher education for the young men of the upper classes. But the general policy of the colony had

been like that of England, to leave educational matters to private enterprise. It is surprising, therefore, to find that the very first movement was for the establishment of a State university and a State system of education.

In January, 1784, two months after the British left New York, Governor George Clinton sent his message to the legislature, in which is found the first public expression of the need of better educational institutions. His words are these: "Neglect of the education of youth is among the evils consequent on war. Perhaps there is scarce anything more worthy your attention than the revival and encouragement of seminaries of learning."[1]

This recommendation received prompt attention in both senate and assembly. The assembly appointed Robert Harpur, formerly a professor in King's College, and two other members, a committee, directed to prepare and bring in a bill "for the establishment of seminaries of learning and schools for the education of youth."[2] In the senate James Duane was made chairman of a "committee for seminaries of learning." Nearly a month later, on February 19, Mr. Duane presented a bill entitled "An act for establishing a university within this State." It is much to be regretted that nothing can be found throwing light upon the origin of this idea of a university. Nor is it known what were the provisions of this bill. Both the governor, George Clinton, and James Duane had been governors of King's College.

After this bill was brought in, it seems to have occurred to the friends of the college that here was a good chance to revive that institution. A petition to the legislature was presented in the senate on March 30, which shows clearly that there was a strong attempt, not only to revive the college, but to make it paramount in the new system which the bill of Mr. Duane had provided for. The petition recited the charter of the college, the death or departure of the majority of the governors, and "that many parts of the said charter are inconsistent with that liberality and that civil and religious freedom which our present happy constitution points out," and urges "that an alteration of that charter in such points as well as an extension of the privileges of the said college so as to render it the mother of an university to be established within this State would tend to diffuse knowledge and extend literature throughout this State." Here is the germ of the whole subsequent policy. The new idea of civil and religious freedom as expressed in the constitution should be inwrought in the new educational system. The victories of the Revolution should be secured. And here emerges that consciousness of greatness, that dream of future empire, which characterized the great minds of the Revolution. What Washington and Jefferson thought in national

[1] Senate journal, 1784, p. 6.

[2] Nothing further appears to have been done in the assembly. The senate carried the matter through.

outline, George Clinton, the uncompromising champion of his State, thought in the narrower outline of his State. There must be a system of education that would meet the demands of the future growth of the State. But these men who had the interests of the State at heart were guardians also of the old college. Naturally, therefore, they sought to render their alma mater "the mother of an university" which was to "diffuse knowledge and extend literature throughout the State." This petition was dated March 24, 1784, and signed by the following "governors of the college commonly called King's College"—George Clinton, Richard Morris, James Duane, Gerard Bancker, Egbert Benson, J. H. Livingston, Samuel Provoost, John Rodgers, John Morin Scott, Leonard Lispenard, John Livingston, William Walton, and Samuel Bayard, jr.[1]

This petition was referred by the senate to the committee of the whole, "to be taken into consideration with the bill for establishing a university within this State." This prompt, strong action on the part of the friends of the college captured the movement which had been started to establish a university, as appears from an entry in the senate journal April 16, 1784, to the effect that Mr. Williams, from the committee of the whole, reported "that they had gone through the bill, made several amendments, and altered the title in words following, viz: 'An act for granting certain privileges to the college heretofore called King's College, for altering the name and charter thereof, and erecting an university within this State.'"

Three days later this amended bill, with altered title, was passed by the senate; April 21 the assembly concurred; May 1 the council of revision approved it, and it became law. The chief justice who sent down the message of approval from the council of revision was Richard Morris, whose name appears second in the list of the petitioners above. Thus George Clinton, the governor, Richard Morris, chief justice, and James Duane, chairman of the senate committee on the bill, were all governors of King's College and signed the petition. Robert Harpur, chairman of the assembly committee, had been a professor in King's College. Besides this, the secretary of state was John Morin Scott, the State treasurer was Gerard Bancker, and the attorney-general was Egbert Benson, all signers of the petition.

No bill could have been passed, probably, under such circumstances which did not strongly recognize the claims of King's College. If there was to be a State system of education, the college would naturally wish to control in that system. The places of influence in the legislature and the chief State offices were held by friends of the old college. Any movement to set up a State university which might destroy the influence of this corporation would have been useless. The above petition to the legislature was virtually a petition by the governors of the college to themselves. These men, filled with the

[1] Conv. proc. (1875), p. 199.

spirit of English conservatism, would have no faith in radical innovation such as that proposed in France at this time. But, as keen lawyers and politicians, they saw that the benefit of the new ideas of State education could be secured by an adaptation of the old corporate organization, in which the power of their college could still be dominant. The scope of the new university should be coextensive with the boundaries of the State; its structure expansive to meet the future expansion of the State. It should be secured from all danger of clerical control; it should be the child of the State, and under the control of the State, while yet depending mainly on private funds for its support. While the college should not comprise all the new university, yet the old property of that institution should be preserved to it, and its influence, for all that they could see, would continue dominant in the new régime. It was a striking instance of that constructive revolution in which New York has proved herself a worthy daughter of England. Revolution by destruction was never suited to English character, and the prevailing character of the influential men in New York was English.

But the law of May 1, 1784, was a compromise. The opposition, which began as far back as 1702, against the domination of the church in education, which showed more strongly in the academy scheme of 1732, with its free students from the counties, and which had grown into an aggressive and threatening spirit of secularization in the controversy over King's College charter, had been vastly strengthened and extended by the Revolution. The idea of State education, with civil, not ecclesiastical, ends in view, had become widespread. It is hard to draw the party lines in the struggle which evidently took place over this legislation. The information to be had is very meager. There were several elements of antagonism, but in all the spirit was the same. It was the warfare between the principle of authority and the principle of freedom. The new State idea opposed the old church idea. The country districts opposed a monopoly by the city of educational advantages. The power of British sympathy was strong, and met by the growing sympathy with France. Against the innovation of a State system which might diminish the importance of the old college, that corporation, strongly intrenched in the places of power, raised a determined front. But the contention was not crystallized. A man like Governor Clinton or Mayor Duane would be in sympathy both with the State movement and the college movement. Alexander Hamilton would protest vigorously against religious tests and church domination, yet he would rather have centralization in the hands of the old corporation than a new State university governed by the counties; and his sympathies were English and aristocratic rather than French and democratic. In the main, of course, the tendency would be to a fusion of the church party, the college party, and the aristocratic or English party on the one hand, and of the State

party, the equal rights or popular party, and the French party on the other. And the conservative elements were largely successful in the legislation of 1784. As the university was constituted by the act of May 1, 1784, and the amendment of November 26, 1784, a body of men who were virtually trustees of Columbia College were made autocrats in the whole educational system of the State, while the funds that had belonged to the old college were restricted to the needs of the new college, and not of the university as a whole. The very title of the act shows the predominance of Columbia. The personnel of the board points the same way. The desire of Columbia College to become the "mother of a university" was thus gratified by a legislative license.

Act of May 1, 1784.[1]—1. "All the rights, privileges, and immunities" of the old corporation of King's College were vested in "the regents of the University of the State of New York."

2. The regents are divided into five classes:

(*a*) Perpetual regents, or regents ex officio, namely, the governor, lieutenant-governor, president of the senate, speaker of the assembly, mayor of New York, mayor of Albany, attorney-general, and secretary of state.

(*b*) County regents. There were 12 counties in the State, and two regents from each county were appointed.

(*c*) Clerical regents. "The clergy of the respective religious denominations in this State" were to choose "one of their body to be a regent in the said university; and in case of death or resignation, to choose and appoint another in the same manner." This language leaving it doubtful whether each denomination was to have a representative upon the board of regents, or all the denominations collectively were to have but one, the amendatory act of November 26, 1784, provided that "the clergy of each respective religious denomition" should "elect one of each of their respective bodies."

(*d*) Founder's regents. Provision was made for the admission into the university, upon the application of the founder, of any college or school "founded by any person or persons, or any body politic or corporate," and by them endowed "with an estate, real or personal, of the yearly value of 1,000 bushels of wheat." Upon admission the endowment was to be vested in the regents and "applied according to the intention of the donor," and the founders and their heirs or successors were to be entitled forever to send a representative, "who, together with the president (if the estate is applied to the use of the college)," should be regents.

(*e*) College representative regents. The fellows, professors, and tutors of the respective colleges were made "regents of the said university ex officio, and capable of voting in every case relative

[1] Laws, seventh session, ch. 51; Pratt's Annals (see Conv. proc. 1875, p. 203).

only to the respective college to which they shall belong, excepting in such cases wherein they shall, respectively, be personally concerned or interested."

3. The succession of regents was to be kept up by appointment "by the governor, by and with the advice and consent of the council of appointment," in such manner as to keep up the representation of counties. This applied only to the county regents. The manner of succession in the other classes has been already given.

4. The regents were to elect their own officers, namely, chancellor, vice-chancellor, treasurer, and secretary.

5. "The regents of the said university, or a majority of them," were empowered "to make ordinances and by-laws for the government of the several colleges which may or shall compose the said university." This power included the appointment and removal of presidents, professors, tutors, fellows, pupils, and servants of the colleges, the fixing of salaries of officers and servants, and the management of the estates of the colleges. There were some limitations upon the exercise of these powers:

(*a*) "No professor shall be in any wise whatsoever accounted ineligible for or by reason of any religious tenet or tenets that he may or shall profess, or be compelled by any by-law or otherwise to take any religious test oath whatsoever."

(*b*) The property vested in the regents which had belonged to King's College was to be "applied solely to the use of the said college," now first called Columbia College. All property vested in the regents subject to a particular use was to be applied strictly according to such use.

6. The regents were empowered to hold "estates, real and personal, to the annual amount of 40,000 bushels of wheat" to use for the general objects of the university, namely, "the further promotion of learning and the extension of literature."

7. The regents were "empowered to found schools and colleges in any part of this State" and to endow them; "every such school or college being at all times to be deemed a part of the university, and as such subject to the control and direction of the said regents" and to their visitation.

8. The degree of "bachelor of arts" was to be granted by the presidents of the respective colleges, but to the regents was given the power "to grant to any of the students of the said university, or to any person or persons thought worthy thereof, all such degrees, as well in divinity, philosophy, civil and municipal laws, as in every other art, science, and faculty whatsoever, as are or may be conferred by all or any of the universities in Europe."

9. "Any religious body or society of men" was allowed to endow a professorship in divinity in the university.

10. "Nothing in this act contained shall be construed to deprive

any person or persons of the right to erect such schools or colleges as to him or them may seem proper, independent of the said university."

Amendatory act of November 26, 1784.[1]—The act of May 1 was evidently not satisfactory to the Columbia men. The board of regents were powerful, but that power was dangerous unless it could be controlled by Columbia influence. As the board was constituted, the college had secured a meager representation. Of the eight "perpetual regents," four—namely, Governor Clinton, Mayor Duane, Attorney-General Benson, and Secretary Scott—were former governors of the college and signers of the petition. The provision for college representation in the board of regents by the presidents, fellows, professors, and tutors would secure control to Columbia only so long as Columbia men outnumbered the others, and these college representatives could vote only in matters pertaining to the college.

Of the 24 county regents, 2 only, Henry B. Livingston and Robert Harpur, representatives of New York City and County, were to be relied on as Columbia men. It took a majority of the regents to make a quorum. Upon such a basis Columbia had small chance to rule even in the conduct of her own affairs. The very appointment of her own professors would be in the hands largely of the county members of the board, and the records of the regents show that few professors were elected till, by the amendment in the act of November 26, 1784, Columbia had filled the board with her own men. The clergy, too, were dissatisfied with the ambiguity of the law as to their representation. A movement for a change in the law was soon begun.

The regents immediately organized. Almost their only task was the care of Columbia College. They arranged for courses of instruction, took charge of the finances of the college, made some attempts to procure professors, and admitted a few students, first among whom was De Witt Clinton, nephew of Governor Clinton, and afterwards himself governor of the State. The regents captured young Clinton as he was on his way to enter Princeton.

But the business dragged. It was hard to get a quorum, so many of the members lived in the country counties. Governor Clinton, in his message to the legislature which convened in October, recommended an amendment. The matter was immediately taken up by the assembly and a bill reported by a committee of three, who were regents. They were all from outside counties, however, and from the fact that the bill never went beyond the committee of the whole, it seems probable that it was not satisfactory to the Columbia men. This conjecture is further supported by the fact that Mr. Duane in the senate, as he had done in case of the original act, brought in a bill to amend this act, which bill was supported by a "representation for the present condition of Columbia College."[2]

[1] Laws of 1784; Pratt's Annals (see Conv. proc. 1875, p. 221).

[2] Sen. Jour. Nov. 19, 1784; Pratt's Annals (see Conv. proc. 1875, p. 218).

In the debate upon this bill it was proposed that £2,552 should be advanced by the State to the regents for the use of Columbia College. This was opposed by Mr. Yates, a country member, who proposed £1,000 instead, and upon the failure of Mr. Yates's proposition another country member moved that an advance of funds be made by the State to "trustees of different congregations on the frontiers of the State, to enable them to rebuild their churches and for the establishment of schools among them." It was clear that Columbia grasped too much to suit the country members. The assembly concurred in the bill with some amendments. The bill finally passed November 26, 1784.

This amendatory act has its chief significance in the personnel of the new regents appointed by it. Thirty-three additional regents were appointed. Of these, 20 were from New York City. The remaining 13 were scattered throughout the other counties. The draft of this bill, which was moved by Mr. Duane, had proposed only the 20 New York members. Doubtless the 13 country members were put in to quiet the opposition of the popular party. These 20 men from New York were John Jay, Samuel Prevost, John H. Livingston, John Rodgers, John Mason, John Ganoe, John Daniel Gros, Johann Ch. Kunze, Joseph De la Plain, Gershom Seixas, Alexander Hamilton, John Lawrence, John Rutherford, Morgan Lewis, Leonard Lispenard, John Cochran, Charles McKnight, Thomas Jones, Malachi Treat, and Nicholas Romain.

They were all good Columbia men. Four of them had signed the petition spoken of above, as governors of King's College. John Jay was a graduate of Columbia, and Alexander Hamilton had been a student there. Six or more of them were shortly afterwards elected professors in the college, and when the act of 1787 gave Columbia a separate board of trustees, all of these 20 men were made such trustees except John Jay and John Rodgers, who remained regents. This amendment, therefore, destroyed the former equality of county representation in the board of regents. There were henceforth 57 county regents instead of 24. Of these 57, New York had 22, Albany had 5, and each of the 10 other counties had 3.

The amendment further provided that the chancellor, vice-chancellor, or senior regent in appointment could call a meeting with only eight other members. Nine members were thus made a quorum instead of the majority formerly required. The popular party, however, succeeded in getting in a proviso that a meeting to be legal must be announced in a newspaper for at least two weeks previously.

The amendment in regard to the representation of the clergy has been already noticed.

It was provided that the regents should meet annually at the same time and place with the legislature, and "that at every such meeting the acts and proceedings of the regents of the said university shall be reported and examined." This language is somewhat ambiguous, but

it does not seem to have been intended that the regents should report to the legislature. The first report to the legislature of which any evidence appears is after the new law of 1787.

The legislation a compromise of parties.—1. The college or corporation party accomplished the following results in this legislation of 1784:

a. "An act for establishing an university within this State" became "An act for granting certain privileges to the college heretofore called King's College for altering the name and charter thereof, and erecting an university within this State."

The arrangement of the provisions of the act, as well as the provisions themselves, show that, as indicated by the change of title, the college party made this act, as amended, a measure primarily for the benefit of the college and secondarily only for the benefit of the State as a whole. The college was to be the source of learning for the whole State. It is even made to appear, by the following extract from the preamble to the bill, that the movement for a university was started by the college. These are the words: "And whereas the remaining governors of the said college, desirous to render the same extensively useful, have prayed that the said college may be erected into a university, and that such other alterations may be made in the charter or letter of incorporation above recited as may render them more conformable to the liberal principles of the constitution of this State; be it therefore enacted, etc." The fact, however, was that the movement for a university began before any action by the college.

b. The form of a corporation similar to that of King's College was retained, with added powers. In the charter of King's College the chief State officers were governors, ex officio, of the corporation, as by this law they were made "perpetual regents."

This single board of regents were virtually trustees of all the colleges in the State; charged with the whole administration and discipline of these colleges. This would give Columbia autocratic control of the whole State system if they could secure control of the board of regents.

c. By the amendatory act of November, Columbia succeeded in obtaining this control of the board. Columbia had at least twenty-two men on the board, all residents of New York City, and therefore easily convened, while only nine members were necessary for a quorum.

Further, the provision that new county regents were to be appointed by the governor and council of appointment was an aristocratic measure that might easily be of aid to Columbia, especially since the seat of the State government was at New York, and the college could always hope to exercise a strong social influence there.

d. The property which had belonged to King's College was still kept for the use of that institution, and the sum of £2,552 was advanced by the State to the regents for the use of the college.

2. The church influence was greatly weakened.

a. The churches lost the ex officio regents which, in the original draft,[1] it was proposed to give them, following the analogy of the ex officio clerical representation in the board of governors of King's College. They gained a full equivalent for this loss, however, in the provision for an elective clerical representation. This was a liberal advance, inasmuch as any sect could now be represented.

b. In the provision against test oaths for professors a great blow was struck at clerical domination.

c. The full freedom to all denominations to establish professorships in divinity marks the triumph of liberal principles.

3. The party which might be called the State University party, or the popular party, secured some considerable gains.

a. They added the mayor of Albany to the ex officio regents and secured increased county representation on the board.

b. The succession of the county members was put indirectly in the hands of the people and was made a State matter.

c. They abolished religious tests.

d. They had given form, however imperfectly, to the new idea of State control in education. They had created an organization which in some measure was vitalized by the life of the State, and which brought the power of the people in their political capacity to bear upon the instruction of the young. Conservatism and the power of corporate interests were still too great to allow thoroughgoing change; but the change was radical so far as it went. Further change was inevitable and not long delayed.

Legislation of 1787.

Predominance of Columbia College.—Columbia had captured the board of regents and for three years controlled their action. In the amendment of November, 1784, it was provided that the next meeting of the regents should follow directly upon the rising of the legislature, without the necessity of a published notice. It resulted from this that four days after the passing of the bill there was a meeting at which only Columbia men were present. Before the amendment of November it was very hard to get a quorum for any purpose. There was only one regular meeting of the board from May to November, 1784. At this meeting officers were elected and committees appointed, and these carried on the work of the regents.[2] The organization of work in the college was naturally the most urgent business of the board, and the friends of Columbia felt especially hampered. It was not surprising that they sought a reorganization of the board. It is chiefly the fact of their filling the board with Columbia men which

[1] N. Y. leg. papers (ms.), No. 274; Pratt's Annals (see Conv. proc. 1875, p. 204).

[2] Minutes of the regents from 1784 to 1787. These are kept among the records of Columbia College. They were printed in Pratt's Annals (see Conv. proc. 1875, pp. 209–262).

shows the positive animus of the change. In reading the minutes of the meetings of the regents and their committees, both before and after the amendatory law of November, 1784, one can not escape the conviction that the activity of the board was narrow and directed almost exclusively to the interests of the college. The only action taken before November looking toward a broader conception of their duty was the sending of one of the regents, Colonel Clarkson, of Kings County, to France and the Netherlands "in order to solicit and receive benefactions for the use of the said university."[1] And Colonel Clarkson was also engaged with the mission of purchasing "such a philosophical apparatus for Columbia College as Dr. Franklin, Mr. Adams, and Mr. Jefferson, ministers of the United States, will advise and his collections will admit." This last clause gives away the whole scheme. The money was to be raised "for the use of said university," but that use was to get a working plant for Columbia. They also attempted to get up a correspondence with certain gentlemen in Ireland with a view to raise subscriptions there "for the use of the university of this State." It is not recorded that any Irish money found its way to New York. Perhaps even at that time the current of subscriptions flowed the other way.

After the amendment of November, few of the non-Columbia men attended, and they but rarely. Until the next annual meeting no notice of meetings was necessary, and the outside members were evidently discouraged. Nearly half the board were Columbia men. They lived at New York, and it was almost impossible for enough State men to attend to show much strength against the college influence. The great State system of education which had been projected threatened to become only a revival of the metropolitan college. The work, narrow as it was, was vigorously pushed. The finances of the college were investigated, professors were elected, largely from among the new members of the board, and an elaborate plan of education was prepared by an able committee, two members of which were Mr. Duane and Alexander Hamilton.[2] Everything possible was done to put the college upon a firm foundation and make it a strong and worthy institution. But for a long time nothing was done looking to the establishment of a broader system. The State was ignored, except as Columbia might furnish the higher education needed in the State. The aristocratic feeling was still dominant, as might have been expected in a body containing such men as Hamilton, Duane, and Jay, of avowed British sympathies, and many others interested chiefly in the maintenance of the prestige of the old corporation. With the meeting of the legislature, however, early in 1785, many country members of the board came in. Their presence was recognized at the meeting on February 15, 1785, by the appointment of Ezra L'Hom-

[1] Regents' minutes, June 4. 1784 (see Conv. proc. 1875, p. 214).

[2] Regents' minutes, Dec. 9 and 14, 1784 (see Conv. proc. 1875, p. 225).

medieu upon a committee "directed to inquire for a fit person to fill the offices of president, professor of moral philosophy, and mathematics in Columbia College." Hamilton and Duane, together with four others besides L'Hommedieu, were members of this committee, who were also to devise means of raising a salary for the president.[1] Mr. L'Hommedieu was a member of the original board of regents from Suffolk County, and was to all appearance the leader of the popular party. There has arisen a controversy as to whether Hamilton or L'Hommedieu was the author of the act of 1787. This matter will be discussed later on.

The board did not meet again until the 4th of April. The above committee reported. Neither Hamilton nor L'Hommedieu was present. The report recommended an address to the public, to solicit voluntary subscriptions to enable the college to carry out its plans, and "that proper persons in each county throughout the State be applied to and requested personally to solicit subscriptions for this purpose and that an application be made to the legislature to grant them an aid by a tax on marriage licenses or any other mode they may think proper."[2] The thought of the Columbia men may have been right, that the revival of the college was the one thing needful at that time for the State, but there was a different feeling elsewhere.

Opposition to the Columbia monopoly.—We have already seen the opposition, from the country members of the legislature, to an advance of State funds to the college. There are other indications of dissatisfaction. On February 25, 1785, Aaron Burr in the assembly brought in a bill entitled "An act for the encouragement of literature."[3] Although this bill never got beyond the second reading, it goes to show that the need of further effort for the advancement of learning was recognized. It was expressly admitted by a committee of the regents themselves, which we shall presently notice more fully, that the act of November, 1784, "placing the rights of every college in the hands of a few individuals," "excited jealousy and dissatisfaction when the interests of literature require that all should be united."[4] At the next annual meeting,[5] when several country members were present, an important step was taken. A committee was appointed "to consider of ways and means of promoting literature throughout the State." The members of the committee were Dr. Livingston, Dr. Rogers, Mr. Mason, General Schuyler,[6] Mr. Peter W. Yates, Brockholst Livingston, General Morris, Mr. Wisner, Mr. Haring,

[1] Regents' minutes, Feb. 15, 1785 (see Conv. proc. 1875, p. 233).
[2] Regents' minutes, Apr. 4, 1785 (see Conv. proc. 1875, p. 236).
[3] Assembly jour. 1785, p. 52.
[4] Regents' minutes, Feb. 16, 1787 (see Conv. proc. 1875, p. 253).
[5] Regents' minutes, Feb. 28, 1786 (see Conv. proc. 1875, p. 243).
[6] General Schuyler was not appointed regent until 1787. In what capacity he acted here is not known.

James Livingston, Mr. John, Mr. Dongan, Mr. Clarkson, Mr. Townsend, Mr. L'Hommedieu, and Mr. Williams.

The committee represented in its membership the different districts of the State. It was appointed upon motion of Dr. Livingston, himself a professor in Columbia. It can not be determined whether this move was made to quiet the popular party with a show of activity in the interest of the State at large, or whether it was a genuine endeavor to broaden the scope of the work done by the regents. Whatever the motive, nothing seems to have been done by the committee. The non-Columbia men were greatly in the majority in this committee, and their failure to see this opportunity, at least to propose some plan to make the university a reality, can not be well explained. Lack of unity among so large a committee would be a plausible suggestion. At any rate they accomplished nothing, and the board went on in its old way, regulating the affairs of the college.

Another matter merits notice before taking up the work accomplished in 1787. In the senate on March 15, 1786, "A memorial of Andrew Law, of the city of New York, praying for an exclusive right of printing sundry new tunes of psalmody, was read and committed to Mr. Stoutenburgh, Mr. Williams, and Mr. L'Hommedieu."[1] They brought in a bill entitled "An act granting to authors of literary performances the exclusive right of printing and vending their works." This bill, after various amendments in senate and assembly,[2] was finally passed under the title "An act to promote literature."[3]

It is in effect a copyright law, but has a "rider" permitting the Reformed Protestant Dutch Church of Flatbush, King's County, to sell certain lands "for the express purpose of erecting an academy in the said county." This was the beginning of Erasmus Hall, the first academy incorporated by the regents. It is important as showing how, outside of the board of regents, independent efforts were being made to promote education. It also identifies Mr. L'Hommedieu with the academy movement. It was this activity for academies outside of New York City that first made head against the predominance of Columbia, and from the beginning Mr. L'Hommedieu was the foremost champion of these academies.

Struggle over the new law.—From April 24, 1786, until January 31, 1787, the regents did not meet. It is evident from the facts recited above that, outside of the circle of the friends of Columbia College, there was dissatisfaction with the neglect by the regents of the general educational interests of the State. The annual meeting, which was always held during the session of the legislature, was near, and at this meeting many of the country members of the regents might be expected to attend. Columbia men seem either to have become dis-

[1] Senate jour., 1786, Mar. 15.

[2] Assembly Jour., 1786, pp. 132–167; Senate jour., 1786, p. 77.

[3] Laws 1786, ch. 54.

satisfied with the present arrangements for the government of their college or to have feared a legislative attempt at reconstruction in the interests of the State at large which might work injury to the college. This meeting of January 31 was of Columbia men almost exclusively. A committee was appointed, which shows that they recognized that the objects of the university had not been attained, and that there was need of prompt action to guard the interests of the college in any change which might be made. The record runs:

Resolved, That a committee be appointed to take into consideration the present state of the university and to report as soon as possible the measures necessary to be adopted to carry into effect the views of the legislature with respect to the same, and particularly with respect to Columbia College, and that Mr. Mayor,[1] Mr. Jay, Dr. Rogers, Dr. Mason, Dr. Livingston, General Clarkson, Mr. Gros, and Mr. Hamilton be a committee for that purpose.[2]

In the evening of February 8 there was another meeting, at which the only action taken was to hear the report of this committee. Dr. Rogers reported progress and asked leave to sit again. This was granted and they adjourned to meet on the evening of February 15. On this very day, February 8, another movement for the establishment of an academy was begun in the senate. It was a petition of Samuel Buell, who was a regent, Nathaniel Gardiner, and David Mulford "in behalf of themselves and others, founders of an academy at East Hampton, in Suffolk County."[3] This was in L'Hommedieu's own county, and the matter was referred to him with three other senators from the southern district, Treadwell, Stoutenburgh, and Vanderbilt. Vanderbilt was also a regent. L'Hommedieu and Stoutenburgh had been instrumental in passing the "Act to promote literature" described above, which also provided for the establishment of an academy at Flatbush, in Kings County, likewise in the southern district. Mr. Williams, who was a regent, had also been associated with L'Hommedieu and Stoutenburgh in the matter of the Flatbush academy, and he becomes prominent afterwards in association with L'Hommedieu in the struggle over the reorganization of the university. The East Hampton academy spoken of in the above petition was the second academy incorporated by the regents after their reorganization, and was called Clinton Academy.

Attempt of Columbia to reorganize the university.—The lines of opposing parties in the struggle can now be indicated with some certainty. At the convening of the legislature in 1787 the friends of Columbia in the board of regents appointed a committee, upon which were James Duane, John Jay, and Alexander Hamilton, to devise means to make effectual the intention of the legislature in the acts of

[1] Mr. Duane.

[2] Regents' minutes, January 31, 1787 (see Conv. proc., 1875, pp. 250, 251, Pratt's Annals).

[3] Senate Jour., February 8, 1787.

1784, "particularly with respect to Columbia College." There were no greater names in the State than these three names. Duane and Jay, particularly the latter, had been the framers of the State constitution of 1777. In this constitution and in their earlier work in the Continental Congress they had shown themselves slow to break with Great Britain, conservative in temper, and aristocratic in sentiment. With Hamilton, they were at this time stemming the tide of popular indignation against the Tories. They were all by nature and legal training conservative and aristocratic. They were Columbia men and would be apt to think first of the college in any system of instruction. But they were also public-spirited and broad-minded men and had the interests of the people at heart. They were admirably fitted for the work of constructive statesmanship, and the Revolution had given them more liberal and progressive ideas. However, they were not truly democratic in spirit. A system of education in which the power should move from the college center at New York outward to the State would be more congenial to them than a system in which the power should move directly from the people. Hamilton was a member of the assembly, where during these very months he led a gallant fight against Governor Clinton upon the subject of granting the Federal Congress a permanent revenue. Hamilton exerted every power to induce this concession to the central Government, but failed. He succeeded, however, in securing the appointment of delegates from New York to the constitutional convention which met in May, 1787. Robert Yates and John Lansing, jr., were Hamilton's colleagues upon this delegation.

These men were strong partisans of the governor, and Lansing, also a member of the assembly, opposed Hamilton upon educational as well as political matters. The opposition of Clinton, Yates, and Lansing to Hamilton in regard to the ratification of the Federal Constitution need not be recounted here. In that famous struggle Duane and Jay and Hamilton acted as a unit. But Hamilton's views were known to favor a far greater degree of centralization than that in the Constitution, while Duane and Jay were not so extreme in their distrust of popular power. Hamilton had been earnest in his attention to the interests of Columbia since his appointment as a regent, serving on very many of the important committees and frequently attending meetings of the regents.

February 15, 1787, the regents met. The date is wrongly given as Thursday, February 16, in the records. Thursday was the 15th, and this date is supported by a subsequent reference in the records. The legislature was already in session. There was quite a large attendance of the regents at this meeting. Richard Varick, speaker of the assembly, presided. Duane, Rogers, Livingston, and Mason, of the committee upon the "state of the university," were present. Hamilton, Jay, and the remaining members were absent. Fortunately, the

report of the committee is spread upon the minutes. It is presented "by order of the committee, Jas. Duane, chairman." An analysis of this remarkable report is necessary in order to appreciate some of the provisions of the subsequent legislation. Three subjects are considered—the university, academies, and public elementary schools.

1. The university. They recommend amendment of the former acts in the following particulars:

a. Changes in "point of form" are needed in regard to filling vacancies in the offices of chancellor and vice-chancellor, in the manner of calling and adjourning meetings, in regard to the annual meetings and the presiding regents, in the absence of official regents.

(*b*) Changes "in the substance of its constitution" are necessary in order "to render the university beneficial according to the liberal views of the legislature." They recommend "that each respective college ought to be intrusted to a distinct corporation with competent powers and privileges, under such subordination to the regents as shall be thought wise and salutary." The reasons are that:

1. While "the regents are the only body corporate" in whom "not only the funds, but the government and direction of every college are exclusively vested," due care can not be given to each institution, owing to the "dispersed situation" of the regents.

2. The "remedy adopted by the second act was to reduce the quorum to a small number, but thus placing the rights of every college in the hands of a few individuals, your committee have reason to believe, excited jealousy and dissatisfaction when the interests of literature require that all should be united."

2. "Academies for the instruction of youth in the languages and useful knowledge." These should receive "liberal protection and encouragement"—

a. By incorporation, which would secure their property and remove the disadvantages arising from their "establishment by private benevolences."

b. By a "permanent superintendence" which "would greatly contribute to the introduction of able teachers, and the preservation of the morals of the students as well as their progress in learning."

3. Public elementary schools. "But before your committee conclude they feel themselves bound in faithfulness to add that the erecting public schools for teaching reading, writing, and arithmetic is an object of very great importance, which ought not to be left to the discretion of private men, but be promoted by public authority. Of so much knowledge no citizen ought to be destitute, and yet it is a reflection as true as it is painful that but too many of our youth are brought up in utter ignorance."

A draft of a bill was presented which appears to have applied only to the university and the academies. It is a misfortune that this draft can not be found. It would throw a great light upon the question of the authorship of the act of 1787. The committee recommended laying the matter before the legislature and their report and the proposed bill were put into the hands of Mr. Varick to present to the legislature. Mr. Varick, being speaker of the assembly, evidently turned the matter over to Hamilton, for the next morning, February 16, Hamilton presented a bill in the assembly entitled "An act to render more effectual an act entitled 'An act for granting certain privileges to the college heretofore called King's College, for altering the name and charter thereof, and erecting an university within this

State.'"[1] The next day this bill was read the second time and committed to committee of the whole.[2] Hamilton seems never to have been able to push his bill further. It may be that the Clintonian opposition to Hamilton was making itself felt even in the matter of educational reform, and that the Columbia men thought their plan more likely to succeed by attempting to capture the independent movement for a new university law then in progress in the senate under the leadership of Ezra L'Hommedieu. It can not be discovered what was Clinton's position in this matter. Shortly after the board had been filled by Columbia men by the amendatory law, Clinton had resigned the chancellorship. This was in April, 1785, and he seems to have attended only two of the meetings of the board until its reorganization after the law of April, 1787. An examination of the Clinton papers (MS.) at the State library at Albany fails to give any clue to his views upon the university. From the catholic tone of his first message to the legislature, from his known democratic opinions, from his magnifying the importance of the State, from his political opposition to Hamilton, from his refusal to mix in the affairs of the university while it was under the domination of the Columbia party, and from the fact that he was again made chancellor upon the reorganization in 1787 upon a truly State basis, it may well be supposed that he represented the State or popular side in this struggle, at least after the antagonism became pronounced.

Popular attempt at reorganization.—It has already been seen that two attempts were made to erect academies on Long Island, one at Flatbush, the other at East Hampton. The assembly journal shows that a petition of Jesse Woodhull and others was presented in 1785, for a law enabling them to raise £200 by lottery to finish an academy at Goshen, Orange County.[3] During this time also a plan was formed of founding a college at Schenectady, in which Dr. John H. Livingston was interested. He was the regent who had moved for a committee to devise means for promoting literature throughout the State, and, although a professor in Columbia, was not a narrow partisan of that institution. He became the principal of Erasmus Hall shortly after it was incorporated. We find indications that there was a call for new educational institutions in every part of the State. As early as 1779 an application was made to the assembly for an act enabling "the trustees of the freeholders and commonalty of the town of Kingston to erect a college or university in the said town." The matter was referred to a committee consisting of Mr. Schoonmaker,

[1] Assembly Jour., 1787, p. 53.

[2] It is surprising that Pratt's Annals, which purport to give accurate transcripts of the minutes of the legislative journals touching this legislation, and which the writer, on a careful reading of the journals, has failed to find defective in any other material point, should have omitted altogether this entry concerning Hamilton's bill.

[3] Assembly Jour., Jan. 31, 1785, p. 7.

Mr. L'Hommedieu, and Mr. Palmer, to which four other members were added, James Gordon of Albany County, Thomas Treadwell of Suffolk County, Egbert Benson of Dutchess County, and Robert Harpur of New York County.[1] This committee had also in charge a petition from John Cuyler and 542 inhabitants of Albany and Tryon counties, and from Thomas Clark and 131 others of Charlotte County, for a college at Schenectady. A bill was prepared and also a charter for this college at Schenectady, which was to be called Clinton College. This charter is preserved among the Clinton papers (No. 3467).[2] These petitions were presented in August, 1779, but nothing further came of them at that time. They show the local need of schools in different parts of the State and the membership of the committee is important in this inquiry. Ezra L'Hommedieu is seen to have been thus early interested in the educational affairs of the State. Egbert Benson and Robert Harpur were regents, and Thomas Treadwell was a member with L'Hommedieu of the senate committee appointed February 8, 1787, upon the petition in behalf of an academy at East Hampton. While the committee of the regents were preparing the bill which was, in all probability, the bill presented by Hamilton to the assembly on February 16, Ezra L'Hommedieu and his colleagues, Treadwell, Stoutenburgh, and Vanderbilt, were laboring upon a bill for the same end. Hamilton's bill was swamped in committee of the whole on February 17. On February 27 the senate journal contains the following entry:

Mr. L'Hommedieu, from the committee to whom was referred the petition of Samuel Buell, Nathaniel Gardiner, and David Mulford for the incorporation of an academy at East Hampton and for other purposes, reported that in the opinion of the committee it will be proper that a bill should be ordered to be brought in, for erecting an university and for granting privileges to colleges and academies within this State, and for repealing the acts therein mentioned, which report he read in his place and delivered the same in at the table, where it was again read, and agreed to by the senate. Whereupon,

Ordered, That Mr. L'Hommedieu prepare and bring in a bill for that purpose.

Mr. L'Hommedieu, according to order, brought in the said bill, which was read the first time and ordered a second reading.

Samuel Buell was a regent, and knew that the university was intended to found and govern academies. Why should these petitioners come to the legislature for a separate charter when they might have the benefits of becoming a part of the university? It seems plain that they were afraid of the board of regents. They preferred incorporation in which they could control their own funds to placing their property in the hands of this board of omnibus trustees, controlled heretofore by a set of men working chiefly in the interests of one institution. The report of the committee of the regents quoted above shows the prick of a guilty conscience on the part of the Columbia

[1] Hist. Record, p. 357. [2] Ibid., pp. 144-357.

ring of control. And from the recommendations of that committee and the independent movement now started for the separate incorporation of academies it becomes evident that regents and nonregents alike recognized the need of reform and agreed upon the direction that reform should take. L'Hommedieu seized the opportunity offered by this petition to prepare a measure reorganizing the university upon a broader basis. He became the champion of the interests of the State as a whole, of the popular and antimonopoly spirit, of a widely spead education that should serve local interests while unified in a State system of the academies against Columbia College.

It is proper here to say a word about this man. He was a descendant of Benjamin L'Hommedieu, a Huguenot, who came to New York from Rochelle after the revocation of the edict of Nantes, and settled at Southhold, Long Island. Ezra L'Hommedieu was born at this place in 1734. He was a graduate of Yale in the class of 1754, after which he traveled in France and continued his studies there. He practiced law in New York City after his return, and during the Revolution became prominent. From 1775–1778 he was a member of the New York provincial congress and took part in the formation of the State constitution. He was then a member of the New York assembly until 1784, when he became State senator, which office he held, with the exception of the year 1793, from 1781 till 1809. For seven years, between 1779 and 1788, he was a delegate to the Continental Congress. He was also a member of the council of revision in New York State for several years, and for one year of the council of appointment. A Federalist at first, he finally went over to the Republicans in 1797. When, on the presentation of the Virginia and Kentucky resolutions in the senate, Mr. King moved a resolution to the effect that the constitutionality of acts of Congress was a question for the judiciary and not for the legislature, L'Hommedieu opposed the resolution.[1] He was a regent from the founding of the university until he died, in 1811. The Clinton papers for 1783 contain many interesting letters which passed between Governor Clinton and L'Hommedieu, at that time a delegate to the Continental Congress. The following letter from Clinton to L'Hommedieu gives a good glimpse of several of the persons connected with this inquiry. On July 6, 1783, L'Hommedieu writes from Middletown, N. Y., to Governor Clinton, at Poughkeepsie, asking him as to the attendance of Gen. John Morin Scott and James Duane at the Congress in Philadelphia, and stating the great disadvantages in his being away from home at that time.

Governor Clinton replies from Poughkeepsie, July 10, 1783:

DEAR SIR: I am favored with yours of the 6th instant. Mr. Duane left this place for Congress yesterday morning. General Scott is indisposed, and there is no hope of his attending. He informs me he has written you so. Hamilton is all impatience to be released. His lady hourly expects him home. She is young and

[1] Hammond, J. B. History of Political Parties in the State of New York, v. i., p. 125.

ought not to be disappointed. Congress have passed, and the prest. forwarded me, a second resolution pressing an immediate representation of the different States as a matter at this juncture of the utmost importance, and a representation of this State depends altogether upon your attendance. The sooner the better. It is as uncertain as ever when the British will leave New York, etc.[1]

It is refreshing to see the governor's solicitude about Hamilton and his lady in view of the bitter antagonism that developed later. This letter shows something of the esteem in which L'Hommedieu was held. An engraving at the State library, which has been printed in the documentary history of New York, shows L'Hommedieu to have had a head of classic shape, with clear-cut features, and vivacious, intelligent expression. He looks like an able and resolute man. L'Hommedieu families still live on Long Island. The pronunciation of their name has degenerated into "Lommidoo."

L'Hommedieu's bill on the next day, February 28, was sent to the committee of the whole. On March 1 Mr. Stoutenburgh reported progress and leave to sit again was granted. This performance was repeated on March 6, 7, and 8. Evidently there was a struggle in progress on the bill.

The regents meanwhile, after the failure of Hamilton's bill in the assembly, were quiet. There is no record of any meeting on February 22, the day to which an adjournment was taken. On the meeting of March 1 no action was taken upon the reorganization of the university. In the evening of March 8, the day on which leave to sit again was granted in the senate upon L'Hommedieu's bill, a meeting of the regents was held with a comparatively large attendance. Hamilton, Duane, and Jay were there. With a few exceptions all who attended were Columbia men. This meeting was the turning point in the history of that legislation. The Columbia men had seen the need of compromise. Their policy was shrewd and effective. They determined to capture the independent movement in the person of Mr. L'Hommedieu himself. They—

Resolved, That a committee of six members of the regency be appointed to consider of the most proper means for procuring an act of the legislature for amending the charter of the university, either in conformity to the bill directed to be presented by the resolution of the board of the 15th of February last or with such alterations as may be found necessary, and that they report to the regency at the next meeting, and that the speaker of the assembly, the mayor of New York, Colonel Hamilton, Mr. Williams, Mr. L'Hommedieu, and Mr. Jay be a committee for that purpose.

Neither the speaker of the assembly (Richard Varick) nor L'Hommedieu were present at that meeting. The Columbia attempt at reorganization had failed in a committee of the whole in the assembly, in spite of the leadership of Hamilton. The attempt of the academy or State party to reconstruct the university, under the leadership of L'Hommedieu, was threatened with defeat in committee of the whole

[1] Clinton Papers. No. 5119.

in the senate. It is probable that both parties were willing to compromise. It is certain that the keen political tact and quick energy of the Columbia men made compromise and consolidation a fact accomplished. L'Hommedieu attended the next meeting of the regents, held only four days afterwards, the first time that he had attended since April 10, 1786. The speaker of the assembly was also present. The committee reported progress and asked leave to sit again.

L'Hommedieu's bill and Hamilton's bill not the same.—It will be remembered that on February 15 the committee of the regents reported a draft of a bill, and that on February 16 Hamilton presented a bill to the assembly. L'Hommedieu's bill was not presented to the senate until February 27. The question naturally arises, Was L'Hommedieu's bill after all the same bill which the regents' committee had prepared and which Hamilton had laid before the assembly? It appears upon the clearest evidence that these bills were not the same.

1. The facts already detailed show an antagonism between the Columbia men in control of the board on the one hand, and the non-Columbia regents and nonregents on the other.

2. L'Hommedieu had not attended the meetings of the regents for nearly a year. He was a Yale man and would naturally have no special interest in Columbia. He was a countryman and would be inclined to attach more importance to the academies and the general needs of the State education than to the management of Columbia college.

3. The titles of the acts indicate a difference.

a. The original university bill proposed in 1784 was entitled, before it was captured by the King's College interest, "An act for establishing a university within this State."

b. After its capture and as passed May 1, 1784, this bill was entitled "An act for granting certain privileges to the college heretofore called King's College, for altering the name and charter thereof, and erecting a university within this State."

c. The amendatory act of November 26, 1784, simply amended by the above title.

d. The assembly journal, date of April 13, 1785, shows that John Lawrence (a regent) brought in a bill entitled "An act to amend and explain two certain acts therein mentioned relative to the university within this State." Nothing is known of this bill, which never went beyond its first reading, and it is introduced here only for the sake of completeness.

e. Hamilton's bill was introduced in the assembly February 16, 1787. The movement in the board of regents, with which Hamilton was concerned and which resulted in the presentation in the assembly of Hamilton's bill, confessedly had for its primary object the bettering of the condition of Columbia College. It was not until after L'Hommedieu's activity began, upon the petition of the East Hampton Acad-

emy, that Hamilton's committee appeared to have considered the academies and schools. The title of Hamilton's bill as introduced into the assembly indicates well the spirit in which it was conceived. "An act to render more effectual an act entitled 'An act for granting certain privileges to the college heretofore called King's College, for altering the name and charter thereof, and erecting a university within this State.'"[1]

f L'Hommedieu's bill was proposed in senate February 27, 1787. The title of this bill shows at once the reversion to the earlier anti-Columbian idea of a truly state university, and the catholic scope of the system proposed. The title runs, "An act for erecting an university and for granting privileges to colleges and academies within this State, and for repealing the acts therein mentioned." L'Hommedieu was for repealing and building anew upon a broader foundation; Hamilton would render more effectual the existing acts.

4. The manuscript drafts of L'Hommedieu's bill show the plainest evidence of his independent action.

Among a collection of manuscripts in the State library, called "New York legislative papers," are several drafts of the bill which finally became the law of April 13, 1787, establishing the university. No. 382 in this collection is the draft of the bill introduced in the senate February 27. It is in two parts which fit together, but there are breaks in it. The first half is indorsed with the title, as given above, in the same handwriting as the body of the draft. Below the title it is indorsed, "In senate 27th Feb., 1787, read 1st time." This handwriting appears also in the indorsement of the subsequent drafts, and seems to be that of the clerk of the senate. The second part is indorsed with the title, and the following words, "In senate 27th Feb., 1787, read 1st time; 28th, read second time and committed." This whole indorsement is in the same handwriting. No. 383 of this collection is a complete draft of this bill, and is indorsed, still in the handwriting of the clerk of the senate, with the title and these words: "In senate 27th Feb., 1787, read 1st time; 28th, read second time and committed." These indorsements correspond with the entries in the senate journal for February 27 and 28. No. 388 is the engrossed draft of this bill referred to in the senate journal of the dates March 19 and 20, and need not be considered here.

The handwriting of the drafts Nos. 382 and 383 is the same throughout. A careful comparison of this handwriting with that of Mr. L'Hommedieu, as appearing in many letters from him to Governor Clinton in 1783, contained in the collection of Clinton papers above referred to,[2] establishes beyond doubt that these drafts are in L'Hommedieu's handwriting. The bill, then introduced into the senate on February 27, and read the second time on February 28, was the work

[1] Assembly journal, 1787, p. 53.

[2] See Clinton papers 5157, 5165, 5166, 5193 5205, 5214, 5223.

of L'Hommedieu's committee, and was in the handwriting of L'Hommedieu. It is not necessary to go into great detail to show that this bill was not the bill of the regents' committee proposed eleven days earlier in the assembly by Hamilton. If the draft of the assembly bill could be found, the matter would be much easier, but this draft can not be unearthed. Not only are the senate drafts in L'Hommedieu's handwriting, but they are not fair copies, as they would be if taken from the Hamilton bill. They are filled with erasures, interlineations, verbal changes, transpositions, and marginal additions and suggestions. They show tentative and gradual construction. And then, to make the matter more certain, at one place in the margin appears this note, like everything else, in L'Hommedieu's handwriting, "Take this clause from the other bill." At one other place appears a similar note, "Take in the clause of the assembly bill." These facts are enough to show that while L'Hommedieu had the assembly bill in mind and used it in the recasting of his own bill, yet his work was independent and different. If further evidence is needed it is ready at hand in the character of L'Hommedieu's scheme.

The first draft does not seem complete, but coincides in the main with the second, which is, however, fuller. A complete state system is proposed, consisting of the university corporation over all; colleges, with which Columbia is coordinated, having each a separate charter; incorporated academies, and schools. With the exception of schools, which are only mentioned, provisions are made with considerable minuteness for the government of these different institutions, all of which are made parts of the university. The language of the law of May 1, 1784, is followed wherever practicable. It must be granted that upon this statement the bill resembles the scheme outlined in the report of the regents' committee. But even upon this showing it might be urged that it was quite as likely that the regents' committee took their ideas of furthering the academies from L'Hommedieu, who had been considering the matter a week before the report of the committee, as that L'Hommedieu took his bill from that of the regents' committee. And since reform had become necessary, it might well be that there was no difference of opinion as to the general character of the reform. But a few of the provisions of L'Hommedieu's proposed law show most positively that he was urging the reform from a standpoint entirely different from that of the Hamilton committee.

1. L'Hommedieu's bill provides, "And no president or professor of the said Columbia College, or any other college or academy recognized by this act, shall be a trustee or governor of such college or academy, nor shall any such governor or president or professor be a regent of the university."[1] In the second draft (No. 383) "tutor" is added to this prescribed list. At the meeting of the regents on February 15, when the report of their committee was "approved and confirmed," and the

[1] N. Y. leg. papers, No. 382.

draft of the bill was directed to be laid before the legislature, there were present twenty-one members. Of these, seven at least were actual professors in Columbia at that time. Eight others were made trustees of Columbia under the new law, and among those eight were Mr. Duane himself, Robert Harpur, a former professor of Columbia, and Dr. Cochran, who had been proffered a professorship and declined. There were only five of the twenty-one present who were not presumably friends of Columbia. Many of these fifteen had been made regents when the board was packed in the interest of Columbia by the amendment of November, 1784. It is not reasonable to suppose that at such a meeting a law would be recommended containing a provision so destructive of Columbia rule in the board of Columbia trustees. This influence of the faculty of Columbia in the board of regents seems to have excited the special hostility of the non-Columbia men.

2. L'Hommedieu's bill provides for an annual visitation of the academies by a committee of regents, "to inquire into the state and progress of literature therein, and to confer the degree of bachelor of arts on such students of such academies as they shall judge deserving of the same, or to direct that such degrees be conferred on such students by the president of any college subject to their visitation."[1] It can not be supposed that the Columbia men would propose such compulsion upon their power to confer degrees.

3. The first draft of L'Hommedieu's bill proposes that the "said Columbia College shall be subject to the visitation of the regents of the university, or a committee from them, who may, as often as the regents shall judge necessary, examine into the funds of the said college, the mode of education, and the progress in literature made by the students, as well as of the learning, abilities, and conduct of the different professors and tutors."[2]

This is the clause which is marked in the margin, "Take this clause from the other bill." In the second draft, which was read the following day in the senate, this clause is somewhat toned down. It reads: "It shall and may be lawful to and for such visitors to inspect and examine into the state of literature and the progress of the students in any of the said colleges, and into the discipline, government, management, laws, and statutes thereof, and the execution of the same, and into the university funds, securities, receipts, expenditures, books of accounts, and vouchers appertaining thereto, in order that a just report thereof may be made to the regents of the said university and by them be laid before the legislature when it shall be found necessary."[2] Again it can not be supposed that the Columbia men would have proposed such subordination on the part of their college to the regents. It looks as if L'Hommedieu had softened the rigor of his first proposal to better suit the temper of the assembly bill.

[1] N. Y. leg. papers, No. 382. [2] N. Y. leg. papers, No. 383.

4. L'Hommedieu's first draft gives the regents a veto upon the "ordinances and by-laws" made by the governors of Columbia "for the government of Columbia College and for the management of (its) estate." In L'Hommedieu's second draft the same power is given the regents. This is then erased, and the following is interlined (after the powers of the trustees of the various colleges to make ordinances and by-laws is stated): "Provided also, that the trustees of the colleges above mentioned respectively lay before the regents of the said university from time to time the plan or system proposed to be adopted for the education of the pupils and students in each of the said colleges, respectively, in order that the same may be revised and examined by the said regents, and by them be altered and confirmed as they shall judge proper."

These powers in the regents do not seem like suggestions from Columbia. The milder veto power in the second draft may well have been a politic concession by L'Hommedieu to the Columbia influence.

5. L'Hommedieu's bill provides that the succession of trustees for Columbia shall be kept up by legislative appointment. This it is impossible to think of as emanating from the Columbia men. In his first draft he proposed for Columbia trustees the same plan as that provided in the law of May 1, 1784, for the succession of regents, namely, appointment by the governor and council of appointment. This was then erased and a blank left for the manner of appointment. In the second draft he proposed at first the filling of vacancies by election "by a majority of the said trustees." This was erased and appointment by the legislature substituted. This provision for the government appointment of trustees is applied in L'Hommedieu's bill to other colleges in the State. All colleges were thus to be State institutions. This is the more remarkable since he proposes to put the academies upon a different footing, succession of academic trustees to be by cooptation. He was the champion of the academies, and wanted them self-governing, subject only to such supervision as would be for their benefit and encouragement. The power of colleges he proposed to restrain through more rigid control by the regents and through legislation renewal of trustees.

A comparison of L'Hommedieu's drafts with the bill actually passed shows that his provisions for academies were substantially incorporated in the law, while in the part of his plan which touched Columbia and the colleges generally he was not nearly so successful.

The conclusion based upon the foregoing considerations, as to the separate character of these two bills, is strengthened and confirmed by the history of this legislation subsequent to the appointment of the committee of regents March 8, 1787, with a view to consolidate the opposing forces and push through a compromise measure. If the L'Hommedieu bill were the same bill as that proposed by the regents' committee, the resolution by the regents on March 8 would not have

spoken of "procuring an act of the legislature for amending the charter of the university, either in conformity to the bill directed to be presented by the resolution of the board of the 15th of February last, or with such alterations as may be found necessary." They would have said "in conformity to the bill now before the senate," or used some equivalent phrase. The difference and the controversy are everywhere apparent. The compromise effected between the two parties remains to be considered.

Consolidation and compromise.—The regents made a strong and politic move in the appointment of their committee on March 8. They made the speaker of the assembly chairman of the committee. They secured the attendance of John Jay at that meeting, a rare advantage. He had attended only three meetings before this since his appointment on February 28, 1786. He accepted a place upon the committee. It would seem from his being appointed regent under the new law, when nearly all of his coappointees of 1784 were made trustees of Columbia, as if he finally had come to act rather against than in favor of Columbia. L'Hommedieu, the leader of the opposition to Columbia in the senate, accepted a place upon the committee and attended the subsequent meetings. This committee was one of great ability. It contained Duane, Hamilton, and Jay. L'Hommedieu was a man of ability and prominence, as is shown by his constant activity on important committees in the senate, as well as by the various offices held by him. Of Varick and Williams not so much is known. The meeting of March 12 has already been noticed. On March 15 the regents met again. The committee were all there except Jay. The other members present were mainly Columbia men. "Colonel Hamilton," from this committee, "reported a bill to be laid before the legislature." It was debated paragraph by paragraph. L'Hommedieu moved to strike out the name of George Clinton from the list of Columbia trustees. The motion was lost, Hamilton and L'Hommedieu, however, both voting in the affirmative. It was also proposed to leave out of the regency the governor and lieutenant-governor, but this was lost. In the final law Clinton is not the trustee of Columbia. The draft of the engrossed bill shows that, as introduced, it contained Clinton's name, which was afterwards erased. It was probably struck out in the legislature. The bill and amendments were then adopted by the regents. The effect of this consolidation of opposing ideas upon the course of legislation appears instantly. Since March 8, L'Hommedieu's bill had lain in committee of the whole. Four days after this agreement between the Columbia party and the academy party, on March 19, in the senate, "Mr. Stoutenburgh, from the committee of the whole," reported that they had gone through the bill, made amendments thereto, altered the title in the words following, viz, "An act to institute a university within this State and for other purposes therein mentioned, and agreed to the same." The senate

agreed to the bill and amendments and ordered the amended bill to be engrossed. The next day, March 20, the bill was passed by the senate. It is the draft of this engrossed bill which is preserved in the New York legislative papers as No. 388. The agreement between L'Hommedieu and the Columbia party seems to have quieted all opposition in the senate. The compromise bill was now not the measure of a party, but the regents' bill. The assembly made some amendments in committee of the whole which were immediately concurred in by the assembly and the amendments ordered to be engrossed.[1] The bill encountered opposition now from Hamilton's political opponent, Mr. Lansing, a partisan of Clinton. On March 24 the Journal shows that Lansing moved to recommit the bill to committee of the whole. Hamilton opposed this motion.

> Colonel Hamilton hoped that the House would not recommit the bill. There was no doubt, he said, but the legislature possessed the right to give this power. There were frequent examples of the kind in Great Britain where this power had been granted. No disadvantage, he said, could arise from it; on the contrary, many would be the benefits. He therefore wished the bill might be finished, as no doubt existed with him of the power and the propriety of the legislature granting those privileges which were mentioned in the bill.[2]

It is not known what were the powers and the privileges thus defended by Hamilton. They may have been the power of incorporating colleges, which encountered opposition later. Lansing's motion was carried and the bill recommitted. A week later two clauses of the bill were reported for consideration by the house. In 1786 a law had been passed appropriating one lot in every township of land "to be applied by the legislature for promoting literature in this State." A clause in the university bill proposed that letters patent for such lots should be granted to the regents. On Lansing's motion this clause was rejected. The other clause was the one empowering the regents, on application, to incorporate colleges upon certain conditions. Lansing moved to reject this clause. His motion was carried, Hamilton voting in the negative.[3]

On April 6 it was reported to the House that in the committee the speaker of the assembly had moved to reconsider this last rejected clause and the committee of the whole had voted for the clause on reconsideration, Hamilton supporting. The regents' committee thus stood firm in the assembly. Hamilton gave the bill his steady support. The bill as amended in committee was agreed to by the assembly on April 6 and the amendments engrossed. On April 10 the assembly journal has an entry which shows a neat stroke of diplomacy on the part of Columbia and the regents. It was moved that the house "adjourn until the afternoon, that the members may have an oppor-

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[1] Assembly jour., March 20, 21, 22, and 23.

[2] Hamilton, Alexander. Works; ed. by H. C. Lodge, v. 6, p. 575.

[3] Assembly jour., March 31, 1787.

tunity to attend the commencement of the students in Columbia College, agreeable to a request of the regents of the university to the legislature." The motion called forth debate, but adjournment was voted—34 to 17. This may have been mere courtesy. The regents met in the assembly chamber. But coming just at this time when the success of the bill was not assured, the courtesy may have had another motive. The next day the assembly passed the bill and amendments. The senate concurred in the amendments April 12, and on April 13 the council of revision sent down its approval by message of Chief Justice Richard Morris, and the bill became law. The timely concessions of Columbia had assured the safety of the measure. The consolidation of both parties, making the regents a unit, had enabled them to secure a law far more satisfactory upon the whole than the old one and one which in its essential features has remained unchanged. Until 1889 there was no thoroughgoing reconstruction of the system, and this law of 1889 was more a codification of the old law than a change in the constitution of the university. From the meager facts reported it seems that the popular house had some jealousy of the university and feared to put such large powers into the hands of a corporation. But the animus of Lansing's opposition may have been only the Clintonian hostility to Hamilton, for the burning question in the New York legislature then was not reform of the constitution of the State university, but the larger question of a reform in the Constitution of the United States. Governor Clinton was mighty in the assembly and stood strongly for his State against any greater control by the Federal Government. Hamilton, on the other hand, believed heartily in the centralization of power in the hands of a strong and capable few. And as he strove for the subordination of the States to the rule of the central Federal Government, so in the State system of education he seems to have striven for the strong mastery of the cultured and able coterie of Columbia men over the undeveloped and self-asserting institutions throughout the State. And as the disintegrating power of State rights showed such irrepressible life that he was compelled to compromise his ideal in the national Constitution, and consent to far greater local power in the States than he believed in; so in the university, to preserve the union he was obliged to compromise, to yield up the paramount influence of the capable institution at New York, then the political as well as the intellectual center of the State, and to allow the local academies a measure of self-government which was opposed to his political ideas. But once committed to the compromise he was the staunch champion of the new university as of the new Federal Constitution. It was not the least mark of Hamilton's greatness that, imperious and ambitious as he was, he was yet capable of forgetting egoism in the presence of the supreme need of society. The founding of the University of the State of New York becomes thus a little part of that vaster movement which consolidated the Union of the States in the Federal Constitution.

Act of April 13, 1787.—This act is far superior to L'Hommedieu's drafts in point of form. There is a definiteness, a precision of compact utterance, and a simplicity which are wanting in his drafts. The topical order is substantially the same. That the changes were the result of the conferences of parties in the regents there can be no doubt. In the act as well as in the draft of the engrossed bill (No. 388) the preamble alone makes this clear. In L'Hommedieu's drafts there was no preamble, and nowhere any reference to any desire for change on the part of the regents. He began abruptly after the title, "Be it enacted," etc., "That there shall be, and hereby is, instituted a university within this State." The act as well as the draft (No. 388) begins with a recital of the two laws of 1784 instituting the university, and proceeds: "And whereas from the representations of the regents of the said university it appears that there are defects in the constitution of said university," etc. Elsewhere similar reference is made to the initiative of the regents. They must appear as united in desiring reform. And that the reform was not alone the earlier measure of Hamilton appears from the title as well as the preamble. Hamilton's bill was entitled "An act to render more effectual an act," etc., giving the title of the law of 1784. The preamble of this act reads, that whereas several amendatory acts of a law lead to confusion, "Wherefore, to the end that the constitution of one the said university may be properly amended and appear entire in law, it will be expedient to delineate and establish the same in this and repeal all former acts relative thereto, *Be it enacted*," etc. This was precisely the programme of L'Hommedieu. The language is largely that of L'Hommedieu and the provisions respecting academies are in the main the same as L'Hommedieu's. The greatest difference between this act and L'Hommedieu's drafts is in regard to Columbia and the colleges. A short analysis of this act will be useful.

1. Instead of the prolix title of Hamilton's bill and the clumsy title of L'Hommedieu's bill, the act has the concise title: "An act to institute a university within this State, and for other purposes therein mentioned."

2. The preamble, as indicated, shows its compromise character.

3. The University.

a Its corporate name is "The Regents of the University of the State of New York."

b There are 21 regents, of whom 2 only, the governor and lieutenant-governor, are regents ex officio.

The regents appointed are John Rodgers, Egbert Benson, Philip Schuyler, Ezra L'Hommedieu, Nathan Carr, Peter Sylvester, John Jay, Dirck Romeyn, James Livingston, Ebenezer Russell, Lewis Morris, Matthew Clarkson, Benjamin Moore, Eliardus Westerlo, Andrew King, William Lynn, Johnathan G. Tomkins, John M'Donald, and Frederick William De Steuben.

c Vacancies are to be filled by the legislature in the manner in which delegates to Congress are appointed. It will be remembered that this was in the days of the Continental Congress. The regents therefore stood as the representatives of the State as a whole, and not of any particular section. The same idea is now maintained in their election in the same manner as Senators of the United States. This provision does not appear in L'Hommedieu's draft and may well have been a centralizing amendment of Hamilton.

d Various provisions are made as to the election of officers, calling and conduct of meetings, etc.

e The general powers of the corporation as to holding of property, etc., are substantially those under the former law.

f The regents are "authorized and required to visit and inspect all the colleges, academies, and schools which are or may be established in this State," to make ordinances and by-laws, and to appoint presidents of colleges and principals of academies if the respective institutions fail to do this for an entire year.

g They are empowered to confer all degrees above bachelor or master of arts which are "usually granted by any university or college in Europe."

h They may apply their funds at their own discretion, except in case of grants made to them charged with an express use.

4. Colleges.

a The regents are authorized to incorporate colleges upon application by citizens or bodies corporate wishing to found colleges under such conditions as they approve; but such corporations are to have the same corporate rights as Columbia College.

b Columbia College.

(1) The original charter of 1754 is confirmed with certain changes—"No persons shall be trustees of the same in virtue of any offices, character, and descriptions whatsoever." L'Hommedieu had proposed the mayor and recorder of New York as ex officio trustees.

(2) The present trustees are James Duane, Samuel Provost, John H. Livingston, Richard Varick, Alexander Hamilton, John Mason, James Wilson, John Gano, Brockholst Livingston, Robert Harpur, John Daniel Gross, Johann Christoff Kunze, Walter Livingston, Lewis A. Scott, Joseph Delaplaine, Leonard Lispenard, Abraham Beach, John Lawrence, John Rutherford, Morgan Lewis, John Cochran, Gershom Seixas, Charles McKnight, Thomas Jones, Malachi Treat, Samuel Bard, Nicholas Romein, Benjamin Kissam, and Ebenezer Crossby. Thus all the faithful Columbia men who had come to her rescue in November, 1784, and had stood by her in the board of regents, attending faithfully the meetings, were rewarded. To make room for the new friends they had gained they appointed 29 on the first board. It was to be reduced to 24, and kept at that figure.

(3) The property and other rights of King's College under the old charter are to be retained.

5. Academies.

a Upon application by founders or benefactors of academies in any cities or counties of the State the regents are empowered upon certain conditions to incorporate such academies. In fact, they are compelled to grant such charters if the conditions are complied with and "they conceive such academy calculated for the promotion of literature."

b Such incorporated academies are granted the usual corporate powers, their annual income, however, being restricted to the "value of 4,000 bushels of wheat."

c The trustees of the academies are empowered at lawful meetings, according to detailed regulations, to "appoint and remove officers, teachers, etc., fix their salaries, and make by-laws for the government of the academies.

d Vacancies in the boards of trustees are to be filled by cooptation.

e The regents are to be visitors of such academies.

f Scholars of academies, upon due examination by the president and professors of any college under the visitation of the regents, who shall be found competent are to be admitted to such college. But this privilege is granted only upon condition that the plan of education in such academies is approved by the regents.

g Academies that are sufficiently advanced may be erected into colleges by the regents.

6. General provisions.

a. There shall be no religious tests for presidents or professors.

b. No professor or tutor in any college or academy shall be a trustee of that institution, and no president or principal, being a trustee, shall have a vote as to his own salary.

c. No "trustee, president, principal, tutor, fellow, or other officer of any college or academy [shall] be a regent of the university."

The regent of the New York University is thus seen to be absolutely different in character to the regent in English universities. As a corollary to this prohibition the law provides that if any college or academy trustee is elected a regent, or vice versa, such person shall make election which position he wishes to occupy.

7. The two former acts are repealed.

The result of this law was twofold. Theoretically, it lessened the rigor of State control of the system by emancipating the colleges from the actual government of the regents. Practically, it widened the scope of this State control by emancipating the regents from any tendency to monopoly of influence. The university immediately began a wide-reaching activity in the incorporation of academies and colleges.

L'Hommedieu's plan of having all the colleges directly dependent

upon the State by having their trustees appointed by the legislature was defeated. It was a bold plan and a grand one. But the love of self-government was too strong to allow so radical an innovation. And L'Hommedieu himself seems to have been vindictive rather than magnanimous in his proposal; for his same plan left to trustees of academies the right of filling vacancies in their boards. He was the champion of the academies. His proposals concerning these institutions were mainly enacted into law. He was apparently a champion in general of local interests. As first proposed, his scheme would have had a judge of the court of common pleas in every county and the mayor of every city in the list of regents ex officio. And in the matter of higher education he was the champion of direct political control. Colleges should have on their boards of trustees the mayors of the cities or the first judge of the counties where these colleges were situated, the rest of the board to be made up by governmental appointment. As the price of carrying through his measures in regard to the academies, he had to concede almost complete autonomy to Columbia, except in the matter of an official inspection by the regents.

The regulations in regard to Columbia must necessarily be the model for future colleges. The idea, then, of a system of colleges in direct organic connection with the political system of the State was lost through the narrow zeal of the Columbia men for their college on the one hand and the equally narrow zeal of the academy men on the other. But the compromise was a distinct gain, and after a century of quiet and, if desultory, still efficient activity, this great organization stands to-day stronger and more active than ever before, and seemingly upon the eve of wider and more splendid achievements.

The law of 1787 constituted the university upon substantially the same basis as that upon which it rests to-day. One effect of the change should be noticed. The idea of county representation upon the board of regents was entirely lost. The regents became the agent of the State—an organ of centralized administration. But this was in a measure offset by the change in the manner of appointment. Instead of appointment by the governor and his council of appointment, the regents were now appointed by the legislature, thus giving a far more popular character to their election. This was probably a concession to the assembly; for there existed in that body, as evinced by Mr. Lansing's opposition, a jealousy of a corporation endowed with such high prerogatives as the board of regents.

The personnel of the new board of regents should also be remarked. The old Columbia men, including Hamilton and Duane, were made trustees of Columbia, and ended their connection with this State establishment. When it is remembered that this scheme was arranged in the compromise committee of the regents, it will serve as strong evidence of the party preference of these men in this struggle. While Hamilton and Duane thus remained with the college, Jay and Rodgers,

of the Columbia appointees of November, 1784, went over to the new board of regents. There is no surprise at seeing L'Hommedieu still among the regents. The most notable accessions to the board of regents were Philip Schuyler, Hamilton's father-in-law, and De Steuben, the sturdy German baron of Revolutionary fame.

Hamilton or L'Hommedieu?—For a century it has been assumed that Alexander Hamilton was the founder of the university. The shadow of his great name has lent a cherished dignity to the corporation. J. C. Hamilton calls it "a bold effort of his genius," in his life of Alexander Hamilton. The regents themselves have ever loved to give currency to the tradition. If not Hamilton, who? So great an institution must have had a great father, and hence this corporate filia nullius has claimed descent from the prolific brain of Hamilton. What is the source of this tradition? The published works of Hamilton give no clew. They contain nothing of importance touching the university or educational matters in general. Mr. Lodge, printing the title of this act in a list of writings attributed formerly to Hamilton, comments thus: "Mr. Proctor, the editor of the forthcoming edition of Hammond's Political History of New York, has, I think, shown conclusively that the act was the work of Ezra L'Hommedieu."[1] It was the writer's good fortune to meet Mr. Proctor, the secretary of the New York State Bar Association, at Albany, whose courtesy and valuable suggestions are here gratefully acknowledged.

Mr. Proctor stated his arguments to the writer, who also read what had been printed by Mr. Proctor upon the matter. From the work already done by the writer, he was inclined to be more skeptical than Mr. Lodge as to the conclusiveness of Mr. Proctor's proof. The matter seemed to demand a more extended and minute research than had been yet given to it. From the facts already detailed, but one conclusion can be reached. The university is not the work of any one man. Whether the whole course of legislation be considered, or only the act of 1787, still it can not be said that any one man has even conceived the whole idea. There is only one man whose activity from first to last was constant in the construction and reconstruction of the university, and that man is neither Hamilton nor L'Hommedieu, but James Duane, the mayor of New York. He introduced the original bill into the senate in 1784, which was afterwards altered in the interest of Columbia. He was an influential regent from the start, and unceasing in his activity. He introduced in the senate the amendatory bill of November, 1784. He was chairman of the committee which, on February 15, 1787, reported a plan of amendment, and he was a member of the final compromise committee of the regents of March 8, 1787. It is not, however, intended here to claim for Duane the whole honor of founding the university. These facts render it impossible, likewise, to attribute this honor chiefly either to Hamilton

[1] Hamilton, Alexander. Works, ed. by H. C. Lodge, v. 9, p. 582.

or to L'Hommedieu, neither of whom had any connection with the earliest founding, and who have been shown to be merely coworkers with Duane and Jay, and others, in the final reconstruction. At the same time it seems only just to say that, upon the final reorganization, the man who stands out most conspicuously for the broader educational ideas which have become dominant in this century is not Alexander Hamilton, but Ezra L'Hommedieu. Hamilton has been half deified, but we are not bidden to render even unto God the things that are Cæsar's. The university of 1787 was a structure reared by many hands.[1]

CHAPTER 3.

AN ERA OF EDUCATIONAL REVOLUTION.

The University of the State of New York a revolution.—This survey of the period from the close of the war in 1783, until the definitive establishment of the system of education in New York by the act of 1787, has made very evident the presence of a new spirit and new ideas in the matter of education. The old college had been, in its form and in its activity, an English educational corporation, serving private interests, controlled by private parties, distinctly under ecclesiastical influence, looking to the State only as a means of obtaining occasional pecuniary aid, or extension of privilege, with no consciousness of identification with the political life of the State, or of duties toward the State. For the rest, private academies, elementary parish schools, or chance schools conducted by private masters, professional training acquired on the old plan of educational master and apprentice; such was the condition. New York in 1784 would well exemplify the ideal of Herbert Spencer and his laissez-faire disciples. Individual initiative has no rival as a principle of educational enterprise. The State did not venture to usurp private "rights."

Between 1783 and 1787 there was a revolution. An attempt on the part of King's College to capture a movement for the establishment of a university, and thus to revive the old corporation with greater immunities and franchises than before, was met by a popular opposition to corporate encroachment, which ended in leaving to Columbia only its own charter, with its government thereunder subject to the inspection and partial control of the State. While the acts of 1784 were primarily in the interest of Columbia, and only secondarily in

[1] There is an interesting memoir of James Duane in the Documentary History of New York, vol. 4, p. 1061. It can not be supposed that a man of Duane's ability would have been a tool in the hands of others in all his activity regarding the university. There may, very probably, exist among the papers of Duane, if they have been preserved, evidence of the writer's conjecture that to him a large measure of credit is due for the establishment of the university.

the interest of the State, yet the movement toward the wider idea steadily grew until, in the act of 1787, the order of procedure was reversed. The university henceforth overshadowed the college and the system became a truly State system, of which Columbia was merely a part.

The policy of the ecclesiasts, to emasculate freedom of thought and to retain direction of education by test oaths and regulations as to the creed of professors and teachers, was likewise defeated by positive legislative provision.

Not only in these special practical matters had the new idea of popular political rights and duties in education become strong and aggressive, but an idea had impressed itself upon the imagination of the people, of a great educational system, coextensive with the political organization of the State, energized and controlled by the State, to be used for the good of the State. And this idea had taken form in an organization, which, while it was nominally a private corporation, had yet no private interests to serve, which was so constituted that its controlling members must always be among the foremost men in the State, and whose "franchises, immunities, and privileges" were simply the most important functions of a State department of education, and these it was obliged to perform by being made accountable to the legislature which created it. With all this radical innovation, the State claimed no monopoly of education. Complete freedom was left to private individuals to establish schools and colleges independent of the State system. Chairs of divinity of any sect could be freely established in the colleges subject to State control.

The principles of State education in New York were, that there should be a State system, that all who asked the benefits of the State system must submit to State control, and that the State regulations should be such as to permit and to secure the highest possible freedom to individual enterprise, both within and without the State system. Conservative as the founders of the university were by instinct and by tradition, they had yet grasped firmly the principle of the right and duty of State control in educational affairs. While to their conservatism is due the corporate form of the institution, and the fact that it actually included in its scope only the higher and secondary schools, yet it was not many years before the more democratic idea of primary schools for the whole people developed into a fixed policy of the State, and became realized in the State department of public instruction already described.

The revolutionary idea not English.—To one who recognizes continuity in the institutional life of a people, the question naturally suggests itself, "Whence came these new ideas?"

It is plain that they were not English in origin. The corporate form of the system, many details of its government, the leaning to clerical influence—these characteristics may well be considered Eng-

lish. But the adaptation of the machinery to its un-English uses, the new motive power and directive energy and, above all, the idea of a symmetrical State system, freed from ecclesiastical influence—these were all foreign to the English character. The conservatism in the change was English. The progressive elements came from other sources. If any proof of this proposition is needed, it is readily furnished by the

Contrast between the University and the English universities.—It is commonly said that Oxford and Cambridge furnished the models for the University of the State of New York. Oxford and Cambridge were groups of colleges associated in one great whole, called the university. Such it is true was also the University of the State of New York, and there can be little doubt that the English university organization was the structural idea at the basis of the New York plan. But beyond this there is no real analogy. All the colleges of the English university were situated in one town. The natural application of the English idea to New York at that time would have been to establish a university at New York City, where alone there was much demand for colleges, leaving to the future the development of similar institutions in other parts of the State. Again, the English university was a great self-governing institution with jurisdiction and legislative control over territory; it was a corporation such as a chartered town, it had feudal immunities, it was a regnum in regno. The New York university, although a corporation with chartered rights, was yet a branch of the State government, created by the legislature, its membership maintained by the legislature, accountable to the legislature. If some special administrative committee of the privy council in England had been granted a corporate form, its duties and responsibilities remaining the same as before—this would have furnished an analogy to the university in New York. "It had duties, not rights, in relation to the State."[1] And this unique State department was adapted with such prophetic skill to the future growth of the State, that from 1787 until the present day it has expanded naturally, without essential change, to meet every need of the State, and has become the inspiration of somewhat similar systems in other States and countries. In this character of practical adjustment to new needs, it may be granted, the English spirit is indeed apparent.

Again, federation is the principle of union in the English university system. Mr. Bryce, in an appendix to his work on the American Commonwealth, draws a remarkable parallel between the federative system of English university government before their late reconstruction, and the government of the Federal Union of the United States. But federation did not describe at all the government of the New York colleges in the university. They were not represented in the board of

[1] Buisson, M. L'enseignement supérieur aux États-unis. (Revue internationale de l'enseignement, Oct. 15, 1886.)

regents. They governed themselves except for the supervision of the university, and this supervision was the authority of the State proceeding outward from its center. The mild government which is exercised by the regents is imperial in its character.

New York created a new personage under the name of "regent." This term seems to have been first used in the old University of Paris. It signified a master, who by his very character of master was qualified to teach. The name passed over to the English universities. A rule grew up that only those masters actually teaching the "regents," as distinguished from the nonregents, should have a right to vote in certain university assemblies. In the Oxford convocation and the Cambridge senate both regents and nonregents voted. The regent then combined the functions of teaching and governing. At Oxford by the Laudian Statutes of 1636, the government was practically put into the hands of the heads of colleges, and the colleges likewise in Cambridge acquired a larger control. New York seized the old officer and name and put them to a new use. The regents became the governing and not the teaching body. The teaching and governing functions became entirely distinct. This use of "regent" has been copied by Michigan, and generally by the State universities in the West.

Revolutionary idea in New York before 1784.—If the new revolutionary ideas wrought out in the founding of the university are not of direct English origin, they were at least partly indigenous to New York soil, and indirectly English. We have seen the idea of State education struggling to the light in the laws of 1702 and 1732 for the establishment of grammar schools. But it is specially in connection with the founding of King's College that the new idea came most strongly into view. The many nationalities and religious sects in the colony tended to produce jealousy of any domination by a particular national or sectional element.

"An act for vesting in trustees the sum of £3,443 18s., raised by way of lottery, for erecting a college within this colony," [1] passed November 25, 1751, appointed ten trustees for the fund. The members of the Church of England predominated, however, and Trinity Church proposed to grant the college the use of land for its buildings. William Livingston, a Presbyterian and a graduate of Yale, a cultured and able lawyer, a writer of sprightly verse and vigorous prose, afterwards governor of New Jersey, led a determined crusade against the plan of procuring a royal charter for the college. He was afraid of the influence of the English Church, since that church so largely controlled the movement. His articles, published in the Independent Reflector [2] in 1753, speak with all the fervor and passion of the French writers of that period about the divinity of "reason" and the curse of ecclesiasticism. This William Livingston was spoken of by Presi-

[1] Pratt's Annals (see Conv. proc., 1873, p. 191).

[2] These are printed in Pratt's Annals (see Conv. proc., 1873, pp. 194–234).

dent Timothy Dwight as a man of most versatile ability. He was nicknamed the "Don Quixote of the Jerseys." He was delegate from New Jersey to the Constitutional Convention of 1787. Henry Brockholst Livingston, one of the regents, was his son, and John Jay married his eldest daughter. He was a cousin of Chancellor Robert R. Livingston.

The germ of the whole modern reform in education is contained in his arguments. This brilliant man represents at once the movement for positive knowledge of practical value, and for civil as against ecclesiastical control in education. "This, therefore, I will venture to lay down for a capital maxim, that unless the education we propose be calculated to render our youth better members of society and useful to the public in proportion to its expense we had better be without it." Education, he claims, "is to improve their (the youth) hearts and understandings, to infuse a public spirit and love of their country, to inspire them with the principles of honor and probity, with a fervent zeal for liberty and a diffusive benevolence for mankind, and, in a word, to make them the more extensively serviceable to the Commonwealth."[1] He refers to Plato, Aristotle, and Lycurgus as making "the education of youth the principal and most essential duty of the magistrate." It is thus to the old Hellenistic spirit that the modern world is ultimately indebted for the new education, an education which strives to be free from traditional bondage of every sort, which is organized upon state rather than church foundations, and which seeks a knowledge practical rather than scholastic.

It is interesting to compare Livingston's words with what Montesquieu has said:

"Political virtue, or virtue proper in a republic," writes Montesquieu, "is the love of country and of equality. It is in a republican government that the whole power of education is needed, for all depends upon the establishment of this political virtue, this love of the laws and of the country, this love which demands an habitual preferment of the public weal to one's own interest, and which is the source of all special virtues, for they are all nothing but this preferment."[2]

And the Frenchman, like the American, mounts to Greek sources for his doctrine.

Livingston has harsh words for the old colleges. "Freedom of thought rarely penetrates those contracted mansions of systematical learning." They are the source of "those voluminous compositions and that learned lumber of gloomy pedants which has so long infested and corrupted the world."[3] The proposed college, he claims, is to be a "public academy," and "a public academy is or ought to be a mere civil institution, and can not with any tolerable propriety be monopolized by any religious sect." His plan for the charter and govern-

[1] Independent Reflector, No. 13, March 23, 1753.
[2] Esprit des lois, v. 4, ch. 5.
[3] Independent Reflector, No. 17.

ment of the proposed college contains several provisions which, while ignored in King's College as established, were triumphant in the organization of the university. Several features of his plan resemble strongly the French schemes of the next decade, which we shall presently notice.

1. He argues against a royal charter as being subject to the caprice of one man's will to change or repeal.

2. "Societies have an indisputable right to direct the education of their youthful members." He bases this proposition upon the social nature of man and the obligations of civil government. "Sensible of this," says he, "was the Spartan lawgiver, who claimed the education of the Lacedæmonian youth as the inalienable right of the Commonwealth."

3. He claims that, therefore, the "legislatures are the lawful guardians" of the college, and that it should be incorporated by "act of assembly" and "be under the inspection of the civil authority." He urges that private contributions will be inadequate to erect a university which would "arrive at any considerable degree of grandeur or utility. The expense attending the first erection and continual support of so great a work requires the united aid of the public." If thus supported by the public, it ought to be created and superintended by the legislature.

4. The advantages from such an institution are general and for the public good, and should be the public care. He asks: "Are the rise of arts, the improvement of husbandry, the increase of trade, the advancement of knowledge in law, physic, morality, policy, and the rules of justice and civil government subjects beneath the attention of our legislature?"

5. He claims that the public control would prevent both domination by any sect or party and corruption in the officials, and that larger private donations may be expected than if the college were under royal control.

6. He would have no establishment of any particular religious profession in the college. No Protestant was to be disqualified on account of his religious persuasion from sustaining any office in the college. There was to be no chair of divinity.

7. "All the trustees are to be nominated, appointed, and incorporated by the act, and whenever an avoidance among them shall happen the same [shall] be reported by the corporation to the next sessions of assembly and such vacancy supplied by legislative act." The governor, the council, and the general assembly are all to concur in these elections.

8. The election and deposition of the president by the trustees are to require legislative confirmation to be valid. "By this means the president, who will have the supreme superintendency of the education of our youth, will be kept in a continual and ultimate dependence upon the public."

9. The by-laws made by the president and trustees are also to require legislative approval to be valid.

10. He would have the "act of incorporation contain as many rules and directions for the government of the college as can be foreseen to be necessary." The object of this is to preserve the "guardianship of the legislature" and prevent "arbitrary domination in the college." He would give inferior officers and students an action at law for every injury against their rights.

Here is seen the spirit of the American Revolution—the resistance to arbitrary power, the passion for self-government.

11. He proposes the establishing by act of legislature of "two government schools in every county," their "guardians" to be annually elected by the people of the county and the expense of their maintenance to be a county charge. This is one of the most remarkable features of his scheme. He conceives it to be necessary in order to secure the success of the college. They would be accessible to the young men in every part of the colony and would become feeding schools for the college. But it is their public character which most draws our attention. He was a century in advance of the legislature of his State in his ideas, nor have we, indeed, yet advanced so far as his plan.

Unless his plan for the college is carried out, he fears it may "prove a perpetual spring of public misery; a cage, as the Scripture speaks, of every unclean bird; the nursery of bigotry and superstition; an engine of persecution, slavery, and oppression; a fountain whose putrid and infectious streams will overflow the land and poison all our enjoyments."

After developing his plan he issued, in No. 22 of the Independent Reflector, an address to the "inhabitants of the province" full of grandiose invocation to the "genius of liberty," the "awful name of reason," and the "spirit of patriotism." "When shall we have one interest," he exclaims, "and that interest the common good?" He is fearful lest "this precious and never-to-be-surrendered equality will be destroyed." He pleads: "Let us, therefore, strive to have the college founded on an ample, a generous, an universal plan. Let not the seat of literature, the abode of the muses, and the nurse of science be transformed into a cloister of bigots, an habitation of superstition, a nursery of ghostly tyranny, a school of rabbinical jargon." "The legislature alone should have the direction of so important an establishment," he continues. "In their hands it is safer—incomparably safer—than in those of a party who will instantly discern a thirst for dominion and lord it over the rest." His proposals and his address were in vain. The college received the royal charter. But the history which we have traced of the attempt to found the university thirty years later was a fulfillment of his prophecy. It was the "thirst for dominion" of this same corporation which nearly succeeded in wrecking the movement for a university upon a broad civil foundation.

The fervid language of Livingston grates upon our ears to-day, but the chief practical features of his plan won a triumph in the final establishment of the university. The controversy over the founding of King's College foreshadowed the later controversy over the founding of the university. It is impossible not to conjecture that the founders of the university studied the plans of Governor Livingston.

Era of educational revolution in America, 1776–1789.—But the current of revolution in education which produced the university in New York had wider sources than the broadsides of the versatile governor of New Jersey. It needs but a glance at the history of the United States from the Declaration of Independence till the organization of the Federal Government to show as complete a revolution in educational ideas and plans as in political institutions. Everywhere throughout the new States, even during the turmoil and struggle of the war and the equally momentous turmoil and struggle of the reconstruction period, we see the new consciousness of political freedom and self-government expressing itself in efforts toward a system of education free from the domination of old traditions, political and ecclesiastical. Nowhere is this tendency more apparent than in the provisions of some of the new State constitutions.

Georgia.—The constitution of Georgia adopted in 1777 provides that "schools shall be erected in each county and supported at the general expense of the State, as the legislature shall hereafter point out."[1] This was followed up by the legislature, which passed in 1783 an act authorizing the governor to grant 1,000 acres of vacant land for the establishment of free county schools.[2]

The message of the governor of Georgia to the legislature in July, 1783, urging the establishment of seminaries of learning suggests a doubt as to the originality of Governor Clinton in his similar message of January, 1784. The University of Georgia, founded in 1785, with its general supervision over the literary interests of the State and including within its organization all the public schools of the State,[3] may well have been suggested by the plan of the New York University. The same liberal spirit in religious matters is evident here.

North Carolina.—The constitution of North Carolina adopted in 1776 renders all clergymen incapable of sitting in any branch of the State legislature and forbids any established church. It provides: "That a school or schools shall be established by the legislature for the convenient instruction of youth, with such salaries to the masters, paid by the public, as may enable them to instruct at low prices; and all useful learning shall be duly encouraged or promoted in one or more universities."[4] In 1789 the University of North Carolina was

[1] Poore's charters, 1:383.

[2] Jones, C. E. Education in Georgia (see Bureau of Education, circular of information No. 4, 1888).

[3] Jones, C. E. Education in Georgia, pp. 40–43.

[4] Poore's charters, 2:1413–1414.

established. Its trustees are appointees of the government. In its incorporation the duty of the State to provide for the education of the young is recognized. North Carolina had made many attempts to establish semipublic schools before the Revolution.[1]

Pennsylvania.—The Pennsylvania constitution of 1776,[2] adopted a few months earlier than that of North Carolina, contains, verbatim, the same provision in regard to the establishment of schools and universities, except that a more direct political idea is seen in the fact that these schools are to be "in each county." Pennsylvania from the beginning has recognized to some extent the State idea in education. This idea is contained in Penn's charter. Penn himself displayed some activity in this direction, and his grammar school founded in 1689 was a quasi public institution. Benjamin Franklin in 1749 propounded a scheme for an academy with a system of elementary schools. This led to the establishment, a few years later, of an academy, which soon became a college, and grew eventually into the University of Pennsylvania. This institution was founded in 1779, in the very midst of the war.[3] After the war the State activity in education greatly increased.

Massachusetts.—Massachusetts was a Puritan protest against the domination of the church. The Plymouth colony brought ideas of public schools from Holland. The board of overseers of Harvard College was practically a public board of control. In fact it had some resemblance to the first board of regents in New York, except that it had control only over the single foundation, whereas the New York idea contemplated an organized system of educational institutions throughout the entire State. The educational revolution in Massachusetts may be said to have begun with the very founding of the colonies.

Virginia.—The most notable of all these plans for an educational revolution was that of Thomas Jefferson. In 1776, as he tells in his autobiography, he conceived the idea that the whole code of Virginia must be reviewed and adapted "to our republican form of government." He proposed a bill to revise the laws and was appointed on a committee, with four others, charged with this duty. In 1779 they presented their plan to the general assembly. Four bills especially were regarded by Jefferson "as forming a system by which every fiber would be eradicated of ancient or future aristocracy; and a foundation laid for a government truly republican." These four bills were: For the repeal of the laws of entail; for the abolition of primogeniture; for establishing religious freedom, and for a general sys-

[1] Smith, C. L. History of education in North Carolina (see Bureau of Education, circular of information No. 2, 1888).

[2] Poore's charters, 2, 1547.

[3] Blackmar, F. W. History of Federal and State aid to higher education (*see* Bureau of Education, circular of information No. 1, 1890).

tem of education. This last measure was the work of Jefferson himself. His "systematical plan of general education" is described by him as being proposed in three bills: "(1) Elementary schools for all children generally, rich and poor; (2) Colleges for a middle degree of instruction, calculated for the common purposes of life, and such as would be desirable for all who were in easy circumstances, and (3) an ultimate grade for teaching the sciences generally, and in their highest degree." There was to be a subdivision of the State into "hundreds or wards," in each of which should be an elementary school. He provided also for another subdivision into 24 districts, with a college in each. William and Mary College was to be enlarged in its scope and made into a university. The schools were to be supported by tax.

Popular opposition to William and Mary College, which was a Church of England institution, defeated Jefferson's first plan, and thus delayed the educational progress of the State several generations. But the plan stands as one of the greatest ideas of this philosophical statesman. It bears comparison with the plans of Turgot and his predecessors, with those of Mirabeau, Talleyrand, Condorcet, and Napoleon, and with the great system of New York which Jefferson himself pointed to in 1820 as putting to shame his tardy State.[1] Jefferson likewise dreamed, as did Washington, of a national university, which should stand for the united people and represent the national life.

Political revolution and educational revolution.—It is significant that the same man who strove to disestablish the English Church in Virginia proposed also this great plan for public education. There is a real connection between these facts. Enough has been said to show how general among the colonies was the new idea of state education accompanying the political revolution. In the colonies, as in Europe, education had been regarded as the peculiar care of the church. It was the concern of the state only as the church was allied to the state. Nothing shows more clearly than the early educational enterprises in Virginia how the whole spring and scope of education was religious, ecclesiastical. It was such motives as the "training of the youth in piety and virtue," the providing of a "seminary of ministers of the gospel," the "educating of infidel children in the true knowledge of God," which led the colonists

[1] An exhaustive account of Jefferson's activity in the development of State education is given by Dr. H. B. Adams in two of the monographs published by the Bureau of Education: "The College of William and Mary," circular No. 1, 1887; and "Thomas Jefferson and the University of Virginia," circular No. 1, 1888. A collection of documents relating to public education in Virginia was published at Richmond in 1817. This book contains Jefferson's first bill of 1779, which provided for elementary schools and colleges or grammar schools. It also has a letter from Jefferson to Peter Carr, written in 1814, detailing a similar plan. The volume has various other important documents relating to this subject.

generally to establish schools. Before the middle of the eighteenth century few and feeble were the steps taken in America toward that fair old Platonic ideal of an education by the state and for the state. It was the revival in the latter half of the last century of the Greek state-idea, as against the Romish church-idea, which has led to the educational systems of our day. Against the idea of authority is opposed the idea of liberty. But the Americans did not discover or invent liberty. While in the essay of John Locke on education he does not advocate state activity, yet there is latent in the sensational psychology which he represents the spirit of freedom of thought, and hence the spirit of war against ecclesiastical control. A church may perhaps dictate a man's intuitions, but no church can dictate the impressions which things make upon sense. Revolt against ecclesiasticism would naturally lead in educational matters to a substitution of the state for the church.

There is another reason why, upon acquiring independence, the American States founded public schools. Colonial governments founded on charters were in the nature of corporations. Some of these charters provided for the establishment of schools and churches. With the growth of colonial independence, with the transition from the consciousness of a corporate existence and activity to the consciousness of a political sovereignty, the idea of state education would be a natural one. The care of education, which had been a duty imposed upon the corporation by the royal charter, became with the growth of self-government a right, no less than a duty, in the state. This explains the appearance in some of the colonies of institutions partly supported and partly controlled by the colony. With complete independence would come the thought of complete state education. And here again it is necessary to pay tribute to John Locke. The English philosophy of political freedom, so well represented in him, had taken deep root in all the colonies. His second essay on government, in which he defended the revolution of 1688, contains much of the very language of the Declaration of Independence and of other political writings in the colonies, assertive of their civil and religious rights. Locke, indeed, went further than they. His attempted defense of private property, as resting on the rights of labor, is the very basis of the socialistic philosophy of this century.

Educational revolution in Europe.—But the direct influence upon the colonists of the philosophy of Locke can not account for the whole revolt, for its depth and its intensity, and especially for the idealistic element; the dream of empire, the symmetry of plan, the centralizing tendency. The educational development in New York, and generally throughout the States, has been toward centralization, not federation, as a principle of union. If we turn our eyes to continental Europe during this period, we shall see that the educational revolution was not merely American, but international. Frederick

the Great was planning a systematic and centralized organization of education for the Prussian state, which he had been laboriously building up during his long reign from 1740 to 1786. Even Catherine of Russia was devising a new university for her realm. In Austria, Maria Theresa had well-nigh wrested the schools from the control of the church and had expelled the Jesuits. She began the reforms which her son, Joseph II, wrought out during that very decade which saw the establishment of the University of the State of New York. This idealistic and revolutionary ruler established between 1780 and 1790 an ideal organization of education—a gradation of state institutions, rising from elementary schools in the smallest districts, through gymnasia and lyceums, to the university. There were, besides, normal and industrial schools, and a thorough system of state inspection.[1]

France, the nursery of the educational revolution.—It is not, however, to Prussia or to Austria that we must look for the inspiration of the new educational ideas, but to France, to idealistic France, to the France of the encyclopedia and the revolution. The three essential ideas in nineteenth century education are: Freedom of thought, state control, and a centralized form of organization. It is Athens and Sparta and Rome brought back. It is to the French philosophers of the last century that we owe this Greek revival, and it is to French administration that we owe the revival of the imperial organization of old Rome. It was the methods of French absolutism which taught the early Prussian rulers the philosophy of centralization, and perhaps the highest justification of Frederick's title of "Great" was his capacity to appropriate and assimilate French ideas and French culture. Stein was a disciple of Turgot. Joseph of Austria was an ardent follower of the French encyclopedists. His adviser in educational matters, Gottfried von Swieten, by whose aid his reforms were planned, was steeped in the new French philosophy. Catherine of Russia applied to Diderot, the creator of the encyclopedia, for a plan for her proposed university. This plan, written in 1774, contains in outline the features of the reformed education.[2]

The mediæval University of Paris was the model and parent of the chief universities in Germany and Great Britain. From the beginning this university was undemocratic, with a tendency to centralization. But this spirit of centralization grew more rapidly in Paris than in Germany, England, or Scotland.[3] The edict of Blois in 1579, proposed an organization into one system of all the universities of France—an idea which became realized in Napoleon's University of France in 1808. In England, on the contrary, the colleges grew to

[1] Schmid. Encyclopædie des Erziehungswesens, art. Maria Theresa, Joseph II, Oesterreich.

[2] Diderot. Oeuvres completes (Tourneaux, 1876–77), vol. 2 and 3.

[3] Encyclopædia Britannica, art. University (Mullinger).

govern the university.[1] Before the colonization of America, the government of the English university was largely decentralized. But France strove to apply to education, as to all parts of the social organization, the imperial idea of Rome. It is, however, in the secularization of learning and the revival of state education that France has achieved the most signal triumph.

In 1762 the Jesuits, who had previously controlled education, were expelled. From this time until Napoleon established his new university in 1808 it was a period of ferment and revolution in educational matters. The educational revolution in France preceded the political revolution.

La Chalotais was one of the chief promoters of the expulsion of the Jesuits. The following year he addressed to the parliament a memorial, entitled, "Essay on national education or a plan of study for youth." It was translated into Dutch, Russian, and German, and gained a wide popularity. The system he urged was one of thorough, all round training for practical ends. The state ought to give to each person that education which was best suited to him. Men would be trained to become able servants of the state. "The children of the state ought to be taught by the state." A civil education should be substituted for the ecclesiastical education they had abolished. He goes back to Greece and Rome for his ideas.[2]

Rolland d'Erceville was president of the parliament which expelled the Jesuits. He was a persistent enemy of the order and earnest in his efforts to build up a new national system. His report to the parliament of Paris in 1768 contains a memorable plan for a national system of education. His great idea was to have the teaching bodies, the colleges, subject to the visitation and control, not of the bishops and clergy, as heretofore, but of a "bureau of correspondence," which was to be a branch of the secular government. The idea was precisely that which found practical form in the organization of the University of the State of New York. Both these men were followers of Rousseau, who exalted nature as the great teacher. "Natural liberty," "natural rights," were the watchwords of the party. Diderot and the encyclopedists generally were of the same school of thought. It was a great revolt of the human mind against the principle of arbitrary authority—a revolt that extended to every department of man's activity. The natural sciences, positive knowledge, were exalted as against scholastic dogmatism. It was the theory of freedom and equality in the state, of religious tolerance, of sense as the source of knowledge. Again we turn to Locke as the immediate

[1] Hamilton, Sir William. Essays. University and colleges. Printed in part in Barnard's American Journal of Education, vol. 24, p. 409.

[2] The writer regrets that he has not been able to see this work, nor the report of Rolland to be next mentioned. He has relied on Buisson's Dictionaire de pédagogie, and other accounts of these two writers.

source of this movement. It was Locke who inspired Rousseau. But France was more priest-ridden than England and carried the doctrines to a feverish culmination. Conspicuous amid the crowd of writers who tried to bring order out of the chaos into which education in France had been thrown, stands Turgot, the great minister of state, who, while true to the new ideas, yet tried to revolutionize without destruction.

It is interesting to contrast the educational theories of Adam Smith and Turgot, personal friends, and alike in much of their economic theory. Smith in 1776 published his Wealth of Nations, in which he advocates private enterprise as the one principle of education, except that he would have governmental activity to some extent in the primary schools. In 1775 Turgot addressed to the King a Memorial on Provincial and Local Government.[1] In this work Turgot sought to show a way of rescue from the disasters that were threatening the nation. He finds the cause of the evil in the lack of order and of union in the social organization. The feeling of a common interest must be made evident. "Individuals must be attached to their families, families to their villages or cities, the cities or villages to their arrondissements, the arrondissements to the provinces, and the provinces to the state." The means by which he proposes to bring about this social harmony is a national system of education. There should be a "Council of national instruction," which should have control over all "the academies, the universities, the colleges, and the primary schools." It is a plan as socialistic in its character as that of Adam Smith is individualistic. These two men represent well the national differences in educational theory at that time. We can not here pursue this subject further. When the Revolution came, the question of education was one of the most prominent in the legislative bodies. Mirabeau, Talleyrand, and Condorcet and others presented reports and plans upon the subject of a national education. Ever since 1762 France had been flooded with writings upon the organization of education. The attempt by the civil authority to manage the schools failed for want of competent instructors, and the clergy partially regained control.

In the drastic demolition of the Revolution the old university and existing schools were swept away. There was chaos until the administrative genius of Napoleon created the University of France, the resurrection of the old imperial methods, but more symmetrical and scientific. The plans, multitudinous as they were from 1762 to 1808, were substantially of one type, a centralized organization, a graded system of instruction, primary schools in every commune for all children, lyceums in the larger divisions, colleges in the departments, a

[1] Turgot. Mémoire au Roi, sur les municipalities, sur la hierarchie qu'on pourrait établir entre elles, et sur les services que le gouvernement en pourrait tirer. (See his Oeuvres. Paris, 1884. Vol. 2, p. 502.)

great university at Paris, a hierarchy of secular teachers to replace the hierarchy of the teaching orders. The state was to be the "all in all" of the system. Education was to be universal, compulsory, and gratuitous. This educational despotism was taught with fervor by the revolutionists.

Nothing is more striking in this great mass of writings than the revival of Greek ideas of education. The education is to be complete—physical, mental, and in the political virtues. It is an education for the state. In the reaction against clericalism the state is enthroned. Society takes the place of the church; nature, the place of God. It is Greek through and through. Rousseau and others consciously follow Plato. In one plan it is even proposed to revive the Spartan training. We have seen how Franklin and William Livingston and Jefferson had planned in the same way. It was a period of general emancipation. No doubt it was partly spontaneous in Germany, in Austria, and in America, as well as in France. But new ideas fly far and fast. They do not respect national boundaries. The educational revolution of the last century was but a part of the same awakening to new life which found expression in political revolution and in the growth of science. It was the dawning of the new age, the second and the greater renaissance, the return of the nineteenth century to classic Greece. And while the spirit was at work elsewhere, it was in the France of the latter half of the eighteenth century that we find the real nursery of the new educational ideas and systems. Thence they were transplanted into Prussia and Austria, and, in this generation, into England. If Italy was the home of the earlier revival of learning, this later stream of humanism flowed from France.

In Italy, where the renaissance began, the organization of universities was democratic and the learning was secular. The University of Paris, centralized in its government and theological in its teaching, became conservative and obstructive to progress; and in the eighteenth century it was a democratic and secular impulse which wrought the later renaissance in France. But this new movement was a revolt, not against organization, but against the controlling forces. The French republican dreamers constructed systems of centralized education. The nineteenth century thus learns from France a new doctrine in government—an imperial organization, energized by popular freedom; a centralized administration, exercised by the people themselves; an imperial democracy. University and state alike are learning this doctrine. An organization truly democratic is anarchy. An imperial organization, with the imperium in the hands of the people, makes democracy a reality.[1]

It is popular to-day to attribute the new education to Prussia, since

[1] Some of the Western States are carrying this doctrine farther than New York, and the regents of the university are elected directly by the people.

but yesterday Prussia has humiliated France. But Prussia did not establish her State system till 1794, after the French plans had been spread throughout Europe and America, and after State systems of education had been actually established in America. There is scarcely a feature in the educational reforms of this century which was not planned and proposed in revolutionary France. It must be frankly admitted that Germany has built and consolidated her systems upon such firm foundations that they are now models for the world. But it is France whose ideas are here wrought into German life. This second Greece has led her captives captive, like the first. The German Empire, like a second Rome, has despoiled her intellectual benefactor. Upon cultured France has been laid the vicarious punishment for the barbaric dullness of Teutonic Europe. It is the French intellect which in art, in the scientific spirit, in political philosophy, in progressive thought, has saved European civilization to the world.

Debt of New York to France.—The two great Americans most conspicuously in sympathy with the French philosophy of their day, Franklin and Jefferson, both had planned systems of education quite after the French pattern. The constitution of New York, promulgated in 1777, solemn and formal document that it is, in the language with which it forbids to priests and clergy civil and military office and declares for freedom of thought in religious matters, shows the mixture of French Jacobinism in the thought of the new state. The first regents turned instinctively to France for aid. French sympathy and French alliance brought to America more than soldiers and money. Against absolutist Jesuitical France spreading from Canada the colonies fought side by side with England in the seven years war. But the defeat of absolutist Jesuitical France by external foes was followed by the defeat of the absolutist Jesuitical element within France by the rising spirit of democracy. And this spirit the New World shared with France. It was the gift of the English revolution of 1688 to them both. And from the close of the seven years war there was a growing interchange of thought and fraternal feeling between France and America. From the similarity between the French plans for national education and the plans and systems of the States after our rebellion against England, there can be no doubt that the French schemes had been studied in America. The war had brought into close contact the leading men of every State. There was quick exchange of ideas upon questions of public policy. Franklin and Cadwallader Colden, the colonial governor of New York, corresponded upon educational matters. John Jay returned from Paris to New York in the summer of 1784. He and Franklin had been close companions at Passy. Jay wrote from Paris that he thought his countrymen had too high an estimate of institutions in France, and advised the education of American youth in America. After his return he

took a conspicuous part in the reorganization of the university, and eventually went over to the more democratic party in that struggle. The new university was undeniably broader, more dominated by the new spirit, more truly a state institution than had been the university of 1784. In the constitutional convention of 1787 plans for a national university were mooted. These facts are but instances of those phenomena, occurring at the same time both in France and in America, which by their evident similarity create the strongest presumption of a reciprocal influence of the two countries upon each other in the progress of educational reform. And the weight of evidence goes to show that before the formation of our national government in 1789, the source of the new ideas was French, rather than American; while, after the outbreak of the French revolution in 1789, the current runs from America to France.

That New York is greatly indebted to France for the idealistic element in her university, there is one point of evidence which comes near to definite proof. The Chevalier Quesnay de Beaurepaire, a grandson of the great French economist Quesnay, after a year of service in the American army, left the army in 1778 on account of ill-health and took up the occupation of teaching. He became acquainted with the chief men in America. He was a true Frenchman, filled with the large revolutionary ideals of that age, and conceived a plan for a great academy at Richmond, which should overstep the national boundaries and make science and learning international. Dr. Adams, in his monograph on Thomas Jefferson and the University of Virginia, has described this project so vividly and so fully that it is not necessary here to enlarge upon it. It was called "The Academy of Science and Letters of the United States of America," and was to be at Richmond. The "academy" consisted of the president, six councilors, a treasurer, secretary, and assistant secretary, a vice-president agent for European shareholders, the professors, teachers, and chief artists, 25 resident associates and 75 foreign associates. The academy at Richmond was to found similar academies at Baltimore, Philadelphia, and New York, the members of these academies to be members likewise of the academy at Richmond. The president, officers, and councilors formed the "council of administration," which had charge of the actual working of the schools. A "committee of correspondence" was formed at Paris, which was charged with the international work of the academy, such as correspondence with foreign societies. The corner stone of the academy building was laid at Richmond June 24, 1786. Previously to this the founder had visited nearly every part of the country, endeavoring to interest the most prominent men of the different States in his scheme. A letter written by Mrs. Bache, the daughter of Franklin, to her father, then in Paris, showed the spirit in which the project was regarded. The letter is dated at Philadelphia, February 27, 1783. Mrs. Bache says: "With

this letter you will receive a project[1] for a French academy which is going to be erected here. The plan is a very extensive one and will be a great honor both to its projector and to America. If it can be carried out, it will not interfere in the least with the work of the colleges, but will be designed to complete the education of young men after they have left the college." She urges Dr. Franklin to secure pecuniary aid, if possible, for "money alone is wanting."

Between this date and the founding of the academy in 1786, Quesnay visited New York. Whether his visit occurred before or after the university acts of 1784 can not be determined. The probability is that it was after that date, so short was the time between the evacuation of New York by the British and this legislation.

He gives in the volume just quoted from, the history of which is told by Dr. Adams, the list of the men at New York whose approval and support he gained. They are Governor Clinton, Mayor Duane, General Baron de Steuben ("the first in this State to adopt my project"), General Cortland (a son of the lieutenant-governor, regent ex officio), Colonel Bland, Dr. Cochran, the families Livingston, Hoffman, Hallet, and some others. The men whom this Frenchman impressed with his great scheme—his "Universal academy," as he thinks it might be called—are the very men who were then considering and debating the problem of a comprehensive system of education for the State. It is no longer a wonder that these reformers of education in New York formed large ideals. The quickening influences of the French imagination, which always overleaps its power of accomplishment, had only a beneficent and fruitful action upon the conservative and practical leaders in New York. It is significant that among the regents of the university, as reorganized in 1787 upon its broader and truly State basis, the name of Baron de Steuben appears. Unfortunately it seems impossible to trace what influence this man, the first in New York to approve the plan of Quesnay, had upon the legislation of 1787. Quesnay's project was not a cracked-brain scheme. It was indorsed by the Royal Academy of Sciences at Paris. The Royal Academy of Painting and Sculpture used these words of approval: "We admire the active constancy of M. le Chevalier Quesnay for this establishment. And no less do we admire the zeal of the United States of America in forming the project. This zeal is a eulogy upon the intellect, the character, and the great views of that republic, which, since its birth, has shown itself so interesting in all respects."[2] Among the councilors of the committee of correspondence is found the name of Fourcroy, who became the adviser of Napoleon in the establishment of his university. Condorcet, whose plan for a national system of education con-

[1] Quesnay de Beaurepaire, chevalier. Mémoire, statuts et prospectus, concernant L'Académie des sciences et beaux-arts des États-Unis de l'Amérique, établie à Richemond. Paris, 1788.

[2] Mémoire, p. 14.

tains nearly every measure of reform which the world has since adopted, was one of the foreign associates, as were likewise Lafayette, Jefferson (then minister at Paris), and Luzerne, the French minister at New York to whom the regents had applied for aid. Quesnay does not seem to have been able to secure Hamilton's approval. But many American names of the highest eminence honor his plan. And this close relation between the thinkers of France and America bore fruit in the influence which American institutions have exercised upon France. The similarity which Napoleon's university of 1808 bore to the New York University of 1787 may not be a mere coincidence when it is seen that Condorcet and Fourcroy were thus early aware of what was being done in America for education. And Talleyrand's intimacy with Hamilton on his visit to America may not have been without effect upon the reconstruction of French education. If France may claim to have given to New York the ideal of a symmetrical State system of secular learning, New York may claim to have given to France the practical form of such a system, in its all-inclusive university corporation.

The American State university.—The survey of the historical origin of the New York University is now complete. It was the work of no one man, of no one tendency. The whole of the colonial history of New York is a history of the growth of ideas and institutions which led to the establishment of the university. The Dutch brought the idea of free public schools for elementary teaching, but it was the idea of joint clerical and civil control. The higher learning was fostered after the English gained control. The French Huguenot refugees brought a spirit which readily united with the democratic elements among the Dutch and English. By the beginning of the eighteenth century the secular spirit was already opposing the spirit of the propagandist society, and the seeds of revolution were scattered throughout the colony by the English revolution and the writings of John Locke. The Whig and Tory struggle was known in New York as in England. In 1702, and again in 1732, attempts were made toward a civil educational institution, and in 1753 Livingston waged a fierce war against ecclesiastical and royalist domination in the proposed college. Already the political and educational revolutions were begun. At the same time the psychology and political philosophy of Locke were awakening the voices of the same twofold revolution in France, and the French philosophers flooded the world with the doctrine of the new civil education. While France was debating, New York was acting. The French ideas of secular education, of State control, of centralized administration, New York seized firmly. But, trained in English law, the New York leaders did not care so much for symmetry and ideal completeness as for an organization which would conserve what was good in the past and would expand to meet the needs of the future. The French plans lost sight of the individual. Their system would

have been socialistic. But individualism was dominant in New York. It was not until 1867 that the people of New York gave in finally to the idea of compulsory, universal, gratuitous instruction in the primary schools. This had been decreed by France in 1791.

The University of the State of New York was a skillful compromise between the new and the old ideas. It conserved to the full advantages of individual initiative, while yet extending the benefits of system, of harmony, of coworking in the various members of the educational body and of organic connection with State life. It was neither English nor French. It was the American university, and as such its idea has largely given the impetus to the development of State educational systems in the West. Wherever the "State university" is governed by a body of regents who have no teaching functions and who are appointed by the political authority and are accountable to the people in their political capacity there is found the influence of this unique invention, "the University of the State of New York."

CHAPTER 4.

A CENTURY OF UNIVERSITY WORK.

It is not the purpose of this sketch to trace the history of the university since its founding. But the present work would be incomplete without some further reference than was contained in the first chapter to the actual achievements and activity of this institution.

There has been scarcely any educational reform in the State of which the university has not been the promoter. It was the agitation of the university for common schools which started the movement that resulted in establishing the State system of primary instruction. In the training of teachers the regents have been specially active. Teachers' classes in academies were instituted by them in 1833, one of the earliest attempts toward normal schools in this country. In the incorporation of colleges and academies the university has endeavored by requiring a high standard of attainment and financial equipment to keep up the level of the higher education. They have finally been given, by the law of 1892, exclusive power of granting charters to educational institutions in order to prevent weak institutions from getting legislative charters.

In the distribution of public funds to the academies they were led in 1864 to devise a method of general examination in the academies upon the basis of which the funds would be apportioned. Since that time the standard of work in the academies has become higher and more nearly uniform. The system, although defective in some particulars, has been a very efficient one, and is carried further at present than ever before.

The direct activity of the university upon the colleges has been

limited. In the law of 1787 Columbia won for herself and for all future colleges almost complete independence, and as yet there has been no marked tendency to give more vigorous control to the university.

The university has conducted various scientific enterprises for the State, chief among which was the determination of the boundaries between New York and Pennsylvania, and between New York and New Jersey; the organization and care of the State museum of natural history, and the conduct and publication of observations in meteorology. Its care of the State library and publication of historical works have already been noticed.

In nothing has the activity of the university been more beneficial than in the publication of its yearly reports. Since 1787 an annual report of the work of the colleges and academies has been regularly made to the legislature. "In 1835 the condition of colleges and academies began to be published in greater detail, and from this time we may begin to date the series of educational statistics which illustrate so fully the history of the colleges and academies of New York, and in which this State stands alone."[1] The one hundred and second report (1887–88), for example, is a volume of nearly 1,000 pages, containing carefully prepared abstracts and tabular abridgments of the reports of all the colleges and academies in the State. These results give information upon courses of instruction, text-books, faculty, financial resources, apparatus, and libraries—in a word, upon all matters connected with the different institutions. Besides these reports the regents' report contains the laws and ordinances relating to the university and a full account of the proceedings of the convocation.

The convocation is an institution of unique type. It was formed in 1863. It is composed of the regents, together with "all instructors in colleges, normal schools, academies, and higher departments of public schools that are subject to the visitation of the regents, and the trustees of all such institutions,"[2] and representatives of the New York State Teachers' Association. Its objects are, by an annual session at the State capitol, to secure better mutual acquaintance, an interchange of opinion upon educational questions, greater harmony through the adoption of common rules, and thus to advance the standard of education throughout the State, and "to exert a direct influence upon the people and the legislature of the State, personally and through the press, so as to secure such an appreciation of a thorough system of education, together with such pecuniary aid and legislative enactments as will place the institutions here represented in a position worthy of the population and resources of the State."[3] It is a sort of sanctified lobby, justified by the sacredness of its cause.

[1] Hist. record, p. 71. [2] Conv. proc. 1869, p. 6. [3] Conv. proc. 1869, p. 9.

The discussions carried on at these sessions are of the utmost importance in the educational work of the State. It is the only place where the various individual interests of the separate institutions can be represented. And while it has no authoritative voice, yet its efficient force in determining the policy of the regents and in affecting legislative opinion has been very great. Its proceedings are published, and among them are papers upon educational topics by the very highest authorities in New York and other States. It is growing in efficiency and in importance. The topics discussed are not merely the educational problems of New York State, but of the nation and of the world. The *personnel* of those who take part in the convocation, likewise, makes it rather a national than a State institution. It is one of the important annual educational conventions held in the United States, and merits well the name of the "Congress of higher education," conferred by Chancellor Curtis.

University Extension.

The university has never undertaken the work of teaching. And wisely so. The educational needs of the State during this century have been mainly just in those lines where there has been most activity, in the common schools and the academies. This was work which there was no need for the university to undertake directly. It is one of the greatest merits of the organization that it has been only the directive power of forces that spring from individual initiative.

With the teaching done by the colleges the university has had no reason to vie. The many colleges in the State have, in the main, given opportunity to all who wished a higher education than the academies could give. But the advancing educational standards of this generation have created a new need. Both in England and in America it is coming to be the recognized duty of the colleges to extend their facilities as far as possible to those persons who can not come to the colleges. The university has been quick to acknowledge this duty. By the law of 1899, "the field of the university has also been extended to include the chartering not only of high schools, academies, and colleges, but also of libraries, museums, summer schools, correspondence schools, permanent lecture courses, and all other institutions for promoting higher education,"[1] and to "maintain lectures connected with higher education in this State."[2] In the address just quoted from, Mr. Dewey has shown how admirably adapted is the system of organization of the university for this work as it is being done in England. He has already organized a successful library school at the State library. He proposes the formation of a great educational library and museum at the regents' office, with

[1] Dewey, Melvil. Extension of the University of the State of New York (see Conv. proc., 1889, p. 73).

[2] University act, 1889

specialists upon its staff, who shall be ready to give advice and direction to the schools and libraries of the State. He proposes a real extension of the work done in all its departments. It is a part of his plan that the State library and State museum, which are parts of the university, should form the central institution of multidinous local libraries and museums to be established throughout the State in organic relation to the university. In connection with these local libraries and museums he would establish university extension lectureships similar to those of England. His ideal is the democracy of learning, a higher education brought within the reach of all. The scheme is full of promise for the future. Already several important steps have been taken toward its accomplishment.

In July, 1889, the regents passed the following resolution:

Resolved, That the regents recognize as an important feature of the work the extension of university learning and culture to those who are unable to take the regular course in a college or university.

They then appointed a committee on university extension to report at the next annual meeting. At the convocation of 1890 a committee of representatives of the colleges and universities of the State was appointed to confer with the regents. Presidents Adams of Cornell, Low of Columbia, Hill of Rochester, Webster of Union, and Taylor of Vassar constituted this committee. In their report to the regents in February, 1891, they use this language:

Resolved, That in the judgment of this committee the time has come when the best interests of higher education in this State demand that the regents should undertake the establishment and supervision of a State system of university extension, including not only lectures, but such conferences, examinations, and certificates of work done as experience may have proved to be desirable and practicable.

Resolved, That in order to maintain a high standard of instruction it is essential that the regents work through the representatives of the universities and colleges of the State as a committee having charge of the details of instruction and examination.

The regents thereupon took immediate action. They made their committee on university extension a standing committee, and provided for a permanent successor to the committee of colleges by the establishment of a university-extension council composed of representatives of the colleges. They also resolved to ask aid of the legislature. Their appeal was promptly and generously met by an appropriation of $10,000 for the use of the university in promoting university extension in the State of New York.[1]

In June, 1891, the regents' standing committee made a valuable report, from which the following extracts are made as showing the aim and scope of the work undertaken:

In the conception of your committee, university extension, as contemplated by the regents of the university, means extension to the people at large, adults as well as youths, of the best obtainable opportunities for education.

[1] Laws, 1891, ch. 303.

In execution of the authority heretofore given them to begin and carry on the work of university extension, your committee design, among other things, to prepare and issue, from time to time, circulars, bulletins, syllabuses, suggested courses of reading and study, and plans for local organizations therefor; to ascertain the fitness of and accredit teachers and lecturers who desire to engage in the work of university extension, and aid localities, organizations, and associations in selecting suitable instructors: to procure and keep on hand, by purchase or by printing and reprinting, original and other matter of educational value in connection with the development and execution of the system of university extension, and to circulate the same, gratuitously or otherwise; and to provide for apparatus and collection of books and specimens, to be loaned or otherwise furnished from time to time to localities, organizations, or associations in this State engaged in educational work—using therefor also any of the properly available books, specimens, apparatus, or other property of the university.

Carefully fostered and wisely developed, university extension will well round out and complete in the State of New York an educational system whose influence may reach all of the people. For those who can avail themselves thereof our common schools, our academies and high schools, and our colleges, universities, and technical schools will cover the whole field of human learning; while the university-extension department will leave none beyond the possibility of such enlightenment as is needful for human welfare and happiness, as well as for good citizenship.

To meet the demands of the new enterprise, the regents at the same time greatly enlarged their system of examinations and regulations for the granting of certificates and diplomas.

This machinery for the extension of university teaching has already been put in operation. Successful courses of lectures have been given and organized centers established for the permanent carrying on of this work. Progress is likely to be slow. True to its traditions the university has confined itself to stimulating and fostering individual local ambition. No part of the State appropriation is allowed to be used in payment of lecturers' fees or other expenses of a local course of lectures. The money of the State is for administrative purposes only which shall further the general scheme. Local benefits must be gained by the enterprise, both moral and financial, of the locality.

It is too early to predict the eventual success or failure of this experiment. But the success of the movement in England, and of similar work done by various organizations in this country, indicates that the times are ripe for such an educational movement. The unique organization of the university would seem to have been specially designed for this work. The London and the Victoria universities are copying some features of the New York University to better enable them to meet new educational needs. The men who founded this imperial university "builded better than they knew."

Looking at the peculiar organization of education in New York, it seems as if success were largely dependent on cordial and wise cooperation between the university and the colleges. If they do not work together the cause is lost in the State of New York. In the university

council the colleges obtain a qualified representative in the management of this department of the regents' work. The colleges wisely insist that the standards of higher education shall not be lowered. The moral force of college opinion should maintain in university-extension work the high standard of collegiate attainment. If the colleges hold aloof the work will necessarily be of a lower type. It is a great opportunity of the colleges to spread their effective influence into every corner of the State, and make themselves more than ever an essential element in the life of the people. The time has come when knowledge must be democratic. It is the duty of the colleges, as the conservators of knowledge, to see that in this growing democracy of learning the standards are not lowered.

The University's Opportunity.

There are, however, other educational needs of the American people which it may become the proud destiny of the University of the State of New York to satisfy. University extension is merely a new method of teaching. It does not solve the question as to what shall be taught.

In American education there are these defects: In the first place, there are not sufficient facilities for original and deep research—the pursuit of truth for its own sake. Secondly, there are no schools designed to train persons for the public civil service. Thirdly, the general education of the people in the principles of political economy and of civil government is not recognized as the duty of the State. It lies within the grasp of the regents of the University of the State of New York to immortalize themselves by taking the lead in these educational reforms.

1. School for graduate work.—For the prosecution of original research the university possesses signal advantages.

The massive State capitol which towers above the city of Albany, and upon which New York has lavished her millions, has been declared by the late Professor Greeman, of Oxford, to be the finest specimen of American architecture. The library of the State, now housed in this building, is a rich mine of historical material, the resources of which are not adequately used—not even adequately known. As the writer was carrying on research there in the summer of 1890 he was oppressed with the sense of the failure of the people of the State to utilize these treasures of learning. The law library is probably unsurpassed in the United States, yet is practically little used. The general library with its 160,000 volumes, its vast collections of manuscripts and documents, is scarcely visited except by the passing traveler. The legislative and executive collections of documents are in requisition during the sessions of the legislature, but are otherwise virtually useless. The idea impressed itself upon the writer that in the university itself, the history of which he was writing, existed the

very organization which could develop into its wider usefulness these libraries under its control.

Here is an opportunity for this great university to advance the interests of the highest learning, to utilize these unused materials, to offer to students the best advantages for original research, and to make the university itself a more powerful and efficient body than it has ever been. The law of 1889 gives the university express power to maintain lectures connected with higher education in the State. The State capitol is such a university building as exists nowhere else in the world. In Albany is centralized the whole administration of the State. The executive offices are all located there. The legislature and the court of appeals sit there. Except in the national capital no such collection of material for the study of history, economics, statistics, finance, and the science of administration exists in the United States. It would need merely the establishment of a few professorships, under the direct management of the university, to develop in a few years a graduate school of economic, historic, and political science unsurpassed in the world.

The graduates of the colleges in the State or from other States could here pursue a regular course of study for higher degrees. A school for the higher and philosophical study of the law has become a crying need of the times. With a few additions to the library of authorities upon Roman and Teutonic systems of law to supplement the magnificent collection of works upon American and English law already upon the shelves, the study of historic and comparative jurisprudence could be carried on by those students who wish to learn more than the practical business of law. Students in economic and political subjects would have for their use not merely the statistics and collected information of the various State departments, but would likewise see the practical workings of those departments. Besides the offices of the governor, secretary of state, controller, and treasurer, there are the offices of the railroad commissioners, canal commissioners, the bank department, the insurance department, State census, land office, State agricultural society, forestry commission, Indian affairs, bureau of labor statistics, State boards of health and charities, of arbitration, of factory inspection, and several others. The legislature itself would be a practical school of political science. Every facility is at hand for research in every department of political science and political economy. No other university would have so admirable an equipment. In historical science likewise the material is at hand. It was the original design of the university to confer the higher degrees. With the work done by academies and colleges the university would not interfere. But in this field of original research lies the proper direction of the activity of the university. This corporation, with its historic dignity, thus would become in truth the head and crown of the educational system in the State. It would strengthen,

not rival, the work of the colleges. The spirit of research has seized our American universities. In the past twenty years they have leaped a long way forward toward the standard of the best European institutions.

But more schools for graduate work are needed. The older colleges, hardened and gnarled by the process of historic growth, can not quickly and easily be adapted to meet the new demands. The University of the State of New York, in the lines of its organization and the method of its government, was predestined at its birth for this higher work. Leaving undergraduate training to existing colleges, its hands would be free for encouragement of the most advanced scholarship.

New York in the old university, of which she is justly proud, has an institution which could shortly lead all the universities of America in this special type of learning.

2. *An academy for the training of civil officers.*—The need of a purer and more efficient civil service is everywhere recognized. That the best way to accomplish this end is by means of proper training schools is an idea likewise common to many minds. Washington, in the same sentences in which he recommended the establishment of the West Point Military Academy for the training of army officers, urged the necessity of a national university, one of the chief aims of which would be training in the science of government. Mr. Casper T. Hopkins, in a thoughtful and suggestive pamphlet, recently published in San Francisco with the title, "Shall we educate our politicians?" even goes so far as to urge the necessity of a special education and training for our legislators. He would have special schools of "statecraft," with the degrees of bachelor, master, and doctor of statecraft. For the main thesis of his pamphlet, that a higher type of politician can be expected only as the result of special training, he presents a series of able arguments supported by telling facts.

Prof. H. B. Adams, in his monograph on the College of William and Mary, has made some admirable suggestions in regard to a "civil academy at Washington."

By adapting to New York conditions some of the proposals of Professor Adams, it will become clear that New York has all the machinery needed for what he calls "the promotion of the higher political education in practical ways." He says: "A civil academy for the training of representative American youth would be as great a boon to the American people as the military and naval academies have already proved." He speaks of New York as uniting two systems of appointment of students, "the West Point plan of taking student appointees from Congressional districts and the Cornell University plan of student appointments for merit." He recommends that such "student appointees or Government fellows" should be under the direction of an educational commission, which should have in charge the government of the academy. New York already possesses such a

commission in the regents of the university. "A few lecture rooms and a working library would suffice. The students should be instructed in physical, historic, and economic geography; in political, constitutional, and diplomatic history; in the modern languages; and in all branches of political science, including political economy, statistics, forestry, administration, international law, comparative methods of legislation, and comparative politics. Instruction should be given in class sections (as at West Point) and in public lectures by Government experts and university specialists, who might be engaged from time to time from different institutions for such services." It is interesting to note that this "merit" system of appointments is an old one in New York. In the law of 1732 for the establishment of "a public school in the city of New York," already described, there is a provision that the schoolmaster shall teach, free of tuition, "the number of 20 youths." They are to be recommended in a certain proportion from the various counties of the colony. "For the cities and counties of New York and Albany, by the respective mayors, recorders, and aldermen thereof, and for the several counties by the justices of the peace at the general sessions to be held for those counties respectively." In the recommendations it was to be certified that "they have been well instructed in reading and writing of English."[1] By a judicious revival of this principle a body of picked young men from every part of the State could be trained at Albany under the direction of the State university to enter into the high civil service of the State; and New York could then not only secure a better civil service in her own departments, but her trained specialists would find their way into every department of the civil service in the other States and in the national civil service as well. It would be another instance of the leadership of New York among the States. In this academy it would be necessary for the university to do work of collegiate grade. No private college could maintain the required discipline. The students must be made to feel that civil service is no less a duty to the State than army service. A military discipline would have to be enforced, and the direct authority of the State alone could do this.

But the very special character of the academy and the necessarily limited number of students who could have the privilege of attendance would prevent any interference with the work of the colleges. This school would fill a place which the colleges do not fill in any sense. It is the duty of the State to attract to its service the best talent of the State and to train that talent to the service of the State. This is specially necessary at this time when so much of the best intellect of the country is allured into the employ of gigantic private corporations. The State ought not to hold out enormous pecuniary reward to tempt talent to public office. But it is within the power of the State to create a sentiment which shall place the honor of the public service above

[1] Pratt's Annals (see Conv. proc. 1869, p. 187).

mere pecuniary reward. A civil "West Point" would do much toward this end.

3. General education in economics and politics.—The scholarly study of political economy and of the principles of civil government is essential to a really successful professional or business career.

When one considers that political issues have become in these later years mainly economic, the importance of a general education of the people in the scientific aspects of their industrial life becomes clear. It is necessary that our legislators and our executive and judicial officers shall understand the effects upon industry, of changes in governmental policy, and that they shall be impressed with the importance of having the economic welfare of the people always before them as the goal of their activity. It is necessary that professional and business men shall understand the relations between the industrial life of the people and the laws and policy of the Government. They must be prepared to bring the force of their opinion to bear upon the public opinion of the country in the face of proposed legislation. For the safe conduct of their business likewise it is essential that they should grasp the scientific principles of their business as well as its practical rules.

Again, it is superlatively necessary that ur people generally should learn something of this economic science which is becoming in our industrial age the great science. Our rulers are chosen from the body of our people by the people themselves. Unless the whole people are trained in economic and political science, how can intelligent elections or intelligent legislation be had? Industry is vastly more important than war to-day. If this country is to achieve the progress it is capable of, the first thing necessary is a right economic policy wisely chosen and firmly pursued. In the omnipresence of the elective system of government this can never be accomplished without the general education of the people in the principles of economic science and of civil government.

The University of the State of New York has a magnificent opportunity to further this end. The graduate school and the civil academy above spoken of would be great aids in this work. They would reach directly, however, only limited classes. To make their work effective along these lines they must adopt the policy of propagating everywhere the idea of this general political education. They might specifically do this in two ways. First, they might encourage the establishment in all the colleges and academies of the State of schools or departments devoted to economic and political science. They might even make this one of the conditions for the admission of new institutions into the university. Secondly, they might, in their university extension work, make economic and political education the most prominent and important work. This is specially demanded of a State

university. Its duty is toward the State. The industries of the people are the life of the State. In the plan of university extension adopted by the university lies a most efficient means of promoting in every part of the State better knowledge of economic and political science and of stimulating the ambition of the people to know more of these subjects. It would likewise become a great agency in finding and leading out into a public career the special talent that might lie hidden in remote corners of the State for lack of opportunity to develop.

For work along the three lines thus pointed out the adaptation of the University of the State of New York is apparent. Its libraries; its museum; its facilities for publication; its coordination of graded institutions, ramifying into every part of the State; the eminence and dignity of its regents; its central bureau, so efficiently organized; its powers, entirely adequate for the maintenance of its lectureships, for examination and conferring of degrees; its university extension methods, so successfully inaugurated; its convocation, bringing to a focus at the center of government the educated public opinion of the State; its close organic relation to the legislature—these are all characteristics fitting the university to undertake this task.

The graduate work could begin immediately in several departments. For example—

1. A graduate school in history and political science, including jurisprudence in its various branches, international law, Roman law, comparative jurisprudence.

2. A graduate school in economics. Besides the theory of economics, public finance, agriculture, forestry, meteorology, banking, insurance, railroads and canals, and other like subjects could be investigated in their economic aspects.

3. An advanced school in pedagogics and library training. The State Normal College could be affiliated, and, together with the State library, made the basis of this school.

4. A school for advanced scientific work in connection with the State museum, and by proper affiliation with the best scientific and technical schools in the State.

The object of these schools should be research. From them should come learned experts, who could become professors and writers in their specialties.

The civil academy, having for its object the training of men and women for intelligent civil service, would have the same facilities at its command. The university, besides founding professorships, could obtain for special lectures in both these schools eminent professors in the colleges of the State and the specialists in the State departments. Only graduates of the colleges, of the civil academy, and others who should pass satisfactory examinations set by the regents should be admitted to the graduate school. The university should there under-

take only the most advanced work. Graduates of the colleges, instead of going to Europe to carry on their researches, would prefer to come to Albany, where they would be more likely to have the opportunity of entering the employ of American universities and of their State or the National Government. The whole country would look to the University of the State of New York for its trained specialists, whether as teachers or as civil officers. The high degrees conferred by the university could be made the most honorable of any in these United States.

In the one institution of the university would be realized the most hopeful ideas in American education to-day—the Johns Hopkins University idea of the highest learning, the West Point idea of special training for the public service, and the idea of emphasizing economics and political science as studies of the first importance in a general education, and the university extension idea of making available to all classes of the people all the facilities of the higher education. The university itself would become a true academy of science and letters, with international influence and a world-wide fame; and perhaps at some time not far distant the Government of the United States, again learning from New York, would carry this innovation to the capital of the nation and thus fulfill the dream of Washington.

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These have been described in the body of this work.

4. PRATT, DANIEL J. Annals of public education in the State of New York, from 1626 to 1746. Albany, 1872.

Published in a separate volume, but also in the University Convocation proceedings for the years 1868, 1869, 1872, 1873, 1875, 1882. This is a most valuable "collection of the official acts and historical records relating to public education" in New York. The first part covers the Dutch period, from 1626 to 1664, and is preceded by an excellent account of the sources. The second part covers the period from 1664 to 1746, or the English colonial period, down to the movement for founding King's College. The third part is "Legislative grants and franchises enacted for the benefit of academies," and extends from 1786 to 1873. The fourth part relates to the founding of King's College, extending from 1784 to 1787. The sixth part begins at 1787 and gives the proceedings of the regents and legislative action in behalf of literature. It stops with 1790.

5. NEW YORK (STATE) UNIVERSITY. Minutes of the regents, from 1784 to 1787.

Printed in Part V of Pratt's Annals. The original records are kept by Columbia College. A copy is held by the regents.

6. NEW YORK (STATE) UNIVERSITY. Annual report, 1827 to date.

There are 105 annual reports. These have not been greatly serviceable for the period covered by this monograph, except for the act of 1889.

7. NEW YORK (STATE), PUBLIC INSTRUCTION, SUPERINTENDENT OF. Annual report, 1855 to date.

The report of 1890 was the thirty-sixth. The reports for 1884 and 1886 have been used in the sketch of the system of primary schools.

8. HOUGH, FRANKLIN B. Historical and statistical record of the University of New York during the century from 1784 to 1884, with an introductory sketch by David Murray, Ph. D., secretary of the board of regents. Albany, 1885.

CHADBOURNE, PAUL ANSEL, *and* MOORE, W. B. State of New York; the public service of the State of New York. Boston, 1882.

A work in three huge quarto volumes. Volume 3 has an extended account of the educational systems of New York.

10. UNITED STATES.—Education, Bureau of.—Monographs.

Notably those by Dr. Adams on "William and Mary College" and on "Thomas Jefferson and the University of Virginia"—that of Dr. Blackmar on "Federal and State Aid to Higher Education," and those on "Georgia," by C. E. Jones, and "North Carolina," by Dr. Smith.

11. TURGOT, ANNE ROBERT JACQUES. Oeuvres, volume 2. Paris, 1884.

12. BUISSON, FERDINAND ÉDOUARD. Dictionaire de pédagogie.

13. SCHMID. Encyclopädie des Erziehungswesens.

14. QUESNAY DE BEAUREPAIRE, *Chevalier*. Mémoire, status et prospectus, concernant l'Académie des sciences et beaux-arts des États Unis de L'Amérique, établie à Richemond. Paris, 1788.

15. SUNDRY DOCUMENTS on the subject of a system of public education for the State of Virginia. Richmond, 1817.

16. SICARD, ABBÉ. History of education from 1762 to 1808 in France (see Le correspondant, new series, Nos. 79, 82, 84, 86, 87, and 88).

17. DRAPER, ANDREW S. Origin and development of the New York common-school system, Albany, 1890.

18. CURTIS, *Chancellor* GEORGE WILLIAM. The University of the State of New York; an address delivered at the university convocation. Albany, 1890. (Regents' bulletin, No. 2, 1890.)

19. HOWARD, *Prof.* GEORGE E. Evolution of the university; annual address before the alumni association of the University of Nebraska. Lincoln, Nebr., 1890.

APPENDIX.

STATE CONSTITUTION, ARTICLE 9.

1. *Common schools.*—The legislature shall provide for the maintenance and support of a system of free common schools, wherein all the children of this State may be educated.

2. *Higher education.*—The corporation created in the year 1784, under the name of the regents of the University of the State of New York, is hereby continued under the name of the University of the State of New York. It shall be governed and its corporate powers, which may be increased, modified, or diminished by the legislature, shall be exercised by not less than nine regents.

3. *Educational funds.*—The capital of the common-school fund, the capital of the literature fund, and the capital of the United States deposit fund shall be respectively preserved inviolate. The revenue of the said common-school fund shall be applied to the support of common schools, the revenue of the said litera-

ture fund shall be applied to the support of academies, and the sum of $25,000 of the revenues of the United States deposit fund shall each year be appropriated to and make part of the capital of the said common-school fund.

4. *Restriction of subsidies.*—Neither the State nor any subdivision thereof shall use its property or credit or any public money, or authorize or permit either to be used, directly or indirectly, in aid or maintenance, other than for examination or inspection, of any school or institution of learning wholly or in part under the control or direction of any religious denomination or in which any denominational tenet or doctrine is taught.

(See also ordinance 4, page 466.)

UNIVERSITY LAW.

[Laws of New York, 1892, chapter 378, as amended to June, 1897.]

AN ACT to revise and consolidate the laws relating to the University of the State of New York.

The people of the State of New York, represented in senate and assembly, do enact as follows:

§ 1 Short title.
2 Definitions.
3 Corporate name and objects.
4 Regents.
5 Officers.
6 Meetings and absences.
7 Quorum and executive committee.
8 Authority of regents to take testimony.
9 By-laws, ordinances, and rules.
10 Departments and their government.
11 General examinations, credentials, and degrees.
12 Academic examinations.
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15 State library; how constituted.
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23 Collections made by the staff.
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27 Charters.
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30 Dissolution and rechartering.
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1 Number and quorum.
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3 Meetings and seniority.
4 Vacancies and elections.
5 Property holding.
6 Control of property.
7 Officers and employees.
8 Removals and suspensions.
9 Degrees and credentials.
10 Rules.
35 Public and free libraries and museums.
36 Establishment.
37 Subsidies.
38 Taxes.
39 Trustees.
40 Incorporation.
41 Reports.
42 Use.
43 Injuries of property.
44 Detention.
45 Transfer of libraries.
46 Local neglect.
47 Loans of books from the State.
48 Advice and instruction from State library officers.
49 Use of fees and fines.
50 Apportionment of public library money.
51 Abolition.
52 Laws repealed.
53 Saving clause.
54 Construction.
55 To take effect.

§ 1. Short title: This chapter shall be known as the university law.

§ 2. Definitions: As used in this chapter—

1. Academies are incorporated schools for instruction in higher branches of education, but not authorized to confer degrees, and such high schools, academic departments in union schools, and similar unincorporated schools as are admitted by the regents to the university as of academic grade.

2. The term college includes universities and other institutions for higher education authorized to confer degrees.

3. University means University of the State of New York.

4. Regents means board of regents of the University of the State of New York.

5. State superintendent means State superintendent of public instruction.

6. Higher education means education in advance of common elementary branches, and includes the work of academies, colleges, universities, professional and technical schools, and educational work connected with libraries, museums, university extension courses, and similar agencies.

7. The term trustees includes directors, managers, or other similar members of the governing board of an educational institution.

§ 3. Corporate name and objects: The corporation created in 1784 under the name of Regents of the University of the State of New York shall continue and be known as the University of the State of New York. Its objects shall be to encourage and promote higher education, to visit and inspect its several institutions and departments, to distribute to or expend or administer for them such property and funds as the State may appropriate therefor or as the university may own or hold in trust or otherwise, and to perform such other duties as may be intrusted to it.

(See also constitution, art. 9, § 2.)

§ 4. Regents: The university shall be governed and all its corporate powers exercised by 19 elective regents, and by the governor, lieutenant-governor, secretary of state, and superintendent of public instruction, who shall be ex officio regents. In case of the death, resignation, refusal to act, or removal from the State of any elective regent, his successor shall be chosen by the legislature in the manner provided by law for the election of Senators in Congress, except that the election may take place at such time during the session of the legislature as it may determine. No person shall be at the same time an elective regent of the university and a trustee, president, principal, or any other officer of any institution belonging to the university.

(Must be at least nine regents. See constitution, art. 9, § 2.)

§ 5. Officers: The elective officers of the university shall be a chancellor and a vice-chancellor who shall serve without salary, a secretary, and such other officers as are deemed necessary by the regents, all of whom shall be chosen by ballot by the regents and shall hold office during their pleasure; but no election, removal, or change of salary of an elective officer shall be made by less than 10 votes in favor thereof. Each regent and each elective officer shall, before entering on his duties, take and file with the secretary of state the oath of office required of State officers.

The chancellor shall preside at all convocations and at all meetings of the regents, confer all degrees which they shall authorize, and fix the time and place of all special meetings. In his absence or inability to act the vice-chancellor, or if he be also absent, the senior regent present shall perform all the duties and have all the powers of the chancellor.

(See also by-laws 8, p. 482, for power to appoint committees, delegates, etc.)

The secretary shall be responsible for the safe-keeping and proper use of the university seal and of the books, records, and other property in charge of the regents, and for the proper administration and discipline of its various offices and

departments, and shall give an undertaking, to be approved by and filed with the State comptroller, in the sum of $10,000 for the faithful discharge of his duties. He may appoint, subject to the confirmation of the chancellor, a deputy to exercise temporarily any specified powers of the secretary in his absence.

(Form, time and place of filing, and effect of failure to file official oath, see public officers' law, 1892, §§ 10, 13, 15, 20.

See also by-law 9, p. 483, for duties as executive officer.)

§ 6. Meetings and absences: In addition to the annual meetings for which the time and place shall be fixed by ordinance of the regents, the chancellor shall call a meeting as often as the business of the university shall require, or on written request of any five regents; and at least 10 days' notice of every meeting shall be mailed to the usual address of each regent. If any regent shall fail to attend three consecutive meetings, without written excuse accepted as satisfactory by the regents not later than the third consecutive meeting from which he has been absent, he shall be deemed to have resigned, and the regents shall promptly report the vacancy to the legislature, which shall fill it as provided in § 4.

(Ordinance 69, p. 481, fixes the annual meeting on the third Thursday of December.)

§ 7. Quorum and executive committee: Ten regents attending shall be a quorum for the transaction of business, but the regents may elect an executive committee of not less than seven, which in the intervals between their meetings may transact such business of the regents as they may authorize, except to grant, alter, suspend, or revoke charters, or to grant honorary degrees.

(See also by-law 3, p. 482, for powers of executive committee.)

§ 8. Authority of regents to take testimony: The regents, or any committee thereof, may take testimony or hear proofs in any manner relating to their official duties, or in any matter which they may lawfully investigate.

(Code of civil procedure, §§ 843, 854–59, in connection with this section, authorizes regents or any committee thereof to issue subpenas, administer oaths, and compel attendance of witnesses.)

§ 9. By-laws, ordinances, and rules: The regents may, as they deem advisable in conformity to law, make, alter, suspend, or repeal any by-laws, ordinances, rules, and resolutions for the accomplishment of the trusts reposed in them, but no such by-law, ordinance, or rule shall modify in any degree the freedom of the governing body of any seminary for the training of priests or clergymen to determine and regulate the entire course of religious, doctrinal, or theological instruction to be given in such institution. No by-law, ordinance, or rule by which more than a majority vote shall be required for any specified action by the regents shall be amended, suspended, or repealed by a smaller vote than that required for action thereunder. [As amended by laws of 1895, ch. 577.]

(See also by-law 29, p. 487, for method of amending or repealing.)

§ 10. Departments and their government: The State library and State museum shall be departments of the university, and the regents may establish such other departments as they deem necessary to discharge the duties imposed on them by law. All university departments shall be under exclusive control of the regents, who shall have all powers of trustees thereof, including authority to appoint all needed officers and employees; to fix their titles, duties, salaries, and terms of service; to make all needed regulations, and to buy, sell, exchange, or receive by will, gift, or on deposit articles or collections properly pertaining thereto; to maintain lectures connected with higher education in this State, and to lend to or deposit permanently with other institutions books, specimens, or other articles in their custody which because of being duplicates or for other reasons will in the judgment of the regents be more useful in said institutions than if retained in the original collections at Albany.

(For administration of State museum, see § 22, p. 499. This section supersedes the clause of laws of 1873, ch. 643, which placed hall of museum in joint charge of regents and State agricultural society.

See also by-law 2, p. 481, on departments and committees.)

§ 11. General examinations, credentials, and degrees: The regents may confer by diploma under their seal such honorary degrees as they may deem proper, and may establish examinations as to attainments in learning, and may award and confer suitable certificates, diplomas, and degrees on persons who satisfactorily meet the requirements prescribed.

(See also by-laws 26–28, pp. 486–87; ordinances 46–66, pp. 476–80.)

§ 12. Academic examinations: The regents shall establish in the academies of the university examinations in studies furnishing a suitable standard of graduation from academies and of admission to colleges, and certificates or diplomas shall be conferred by the regents on students who satisfactorily pass such examinations.

§ 13. Admission and fees: Any person shall be admitted to these examinations who shall conform to the rules and pay the fees prescribed by the regents, and said fees shall not exceed one dollar for each academic branch, or five dollars for each higher branch in which the candidate is examined; and all fees received may be used by the regents for expenses of examinations.

(See also ordinance 49, p. 476, for rules about admission.)

§ 14. Extension of educational facilities: The regents may cooperate with other agencies in bringing within the reach of the people at large increased educational opportunities and facilities by stimulating interest, recommending methods, designating suitable teachers and lecturers, lending necessary books and apparatus, conducting examinations, and granting credentials and otherwise aiding such work. No money appropriated by the State for this work shall be expended in paying for services or expenses of teachers or lecturers.

§ 15. State library, how constituted: All books, pamphlets, manuscripts, records, archives, and maps, and all other property appropriate to a general library, if owned by the State and not placed in other custody by law, shall be in charge of the regents and constitute the State library.

§ 16. Manuscripts and records 'on file': Manuscript or printed papers of the legislature, usually termed 'on file,' and which shall have been on file more than five years in custody of the senate and assembly clerks, and all public records of the State not placed in other custody by a specific law, shall be part of the State library, and shall be kept in rooms assigned and suitably arranged for that purpose by the trustees of the capitol. The regents shall cause such papers and records to be so classified and arranged that they can be easily found. No paper or record shall be removed from such files except on a resolution of the senate and assembly withdrawing them for a temporary purpose, and, in case of such removal, a description of the paper or record and the name of the person removing the same shall be entered in a book provided for that purpose, with the date of its delivery and return.

§ 17. Use: The State library shall be kept open not less than eight hours every week day in the year, and members of the legislature, judges of the court of appeals, justices of the supreme court, and heads of State departments may borrow from the library books for use in Albany, but shall be subject to such restrictions and penalties as may be prescribed by the regents for the safety or greater usefulness of the library. Others shall be entitled to use or borrow books from the library only on such conditions as the regents shall prescribe.

(Laws of 1891, ch. 377, § 1, makes the first appropriation for the State medical library and § 2 embodies the conditions of the gift by the Albany Medical College of its library, as follows:

§ 2. The said medical library shall be a part of the New York State library under the same government and regulations, and shall be open for consultation to every citizen of the State at all hours when the State law library is open, and shall be available for borrowing books to every accredited physician residing in the State of New York who shall conform to the rules made by the regents for insuring proper protection and the largest usefulness to the people of the said medical library.)

§ 18. Book appropriation: The treasurer shall pay annually to the regents, on warrant of the comptroller, $15,000 for books, serials, and binding for the State library.

§ 19. Duplicate department: The regents shall have charge of the preparation, publication, and distribution, whether by sale, exchange, or gift, of the colonial history, natural history, and all other State publications not otherwise assigned by law. To guard against waste or destruction of State publications, and to provide for completion of sets to be permanently preserved in American and foreign libraries, the regents shall maintain a duplicate department to which each State department, bureau, board, or commission shall send not less than five copies of each of its publications when issued, and, after completing its distribution, any remaining copies which it no longer requires. The above, with any other publications not needed in the State library, shall be the duplicate department, and rules for sale, exchange, or distribution from it shall be fixed by the regents, who shall use all receipts from such exchanges or sales for expenses and for increasing the State library. The State printer shall furnish to this duplicate department, immediately after its printing, as many copies of each publication printed at State expense as the regents shall certify to be necessary to enable them to supply one copy to each library which shall conform to the rules established by the regents as to preservation and making available for public reference, and shall be registered by the regents as properly entitled to such publication. In case the officer to whom the edition of any publication is to be delivered shall notify the State printers in writing, and before printing, that the edition provided will be insufficient for his use if the library copies are deducted, there shall be printed as many extra copies as he shall require not exceeding the number delivered for library use. (As amended by laws of 1895, ch. 859, § 1.)

(Legislative law, 1892, § 46–47, provides 230 copies of journals and documents for incorporated colleges and universities in New York and for literary and scientific exchanges made by the regents, and two copies of journals, documents, and bills for State library.

See also by-law 16, p. 485.)

§ 20. Transfers from State officers: The librarian of any library owned by the State, or the officer in charge of any State department, bureau, board, commission, or other office, may, with the approval of the regents, transfer to the permanent custody of the State library or museum any books, papers, maps, manuscripts, specimens, or other articles which, because of being duplicates or for other reasons, will, in his judgment, be more useful to the State in the State library or museum than if retained in his keeping.

§ 21. Other libraries owned by the State: The report of the State library to the legislature shall include a statement of the total number of volumes or pamphlets, the number added during the year, with a summary of operations and conditions, and any needed recommendation for safety or usefulness for each of the other libraries owned by the State, the custodian of which shall furnish such information or facilities for inspection as the regents may require for making this report. Each of these libraries shall be under the sole control now provided by law, but for the annual report of the total number of books owned by or bought each year by the State, it shall be considered as a branch of the State library and shall be entitled

to any facilities for exchange of duplicates, interlibrary loans, or other privileges properly accorded to a branch.

(For report of State library, see § 25.)

§ 22. State museum, how constituted: All scientific specimens and collections, works of art, objects of historic interest, and similar property appropriate to a general museum, if owned by the State and not placed in other custody by a specific law, shall constitute the State museum, and one of its officers shall annually inspect all such property not kept in the State museum rooms, and the annual report of the museum to the legislature shall include summaries of such property, with its location, and any needed recommendations as to its safety or usefulness. Unless otherwise provided by law, the State museum shall include the work of the State geologist and paleontologist, the State botanist, and the State entomologist, who, with their assistants, shall be included in the scientific staff of the State museum. (As amended by laws of 1896, ch. 493, § 1; § 2 is not general, but refers solely to present State geologist.)

(For general control of museum see § 10 and note. Location of museum, scientific staff, etc., L. 1883, ch. 355; L. 1845, ch. 179, § 2, reads:

§ 2. The executive committee of the New York State Agricultural Society may have the free use of said cabinets of natural history and all the specimens therein deposited, at any and all times, for such purpose as such committee shall desire, subject to the direction and regulations of the regents of the university: *Provided*, That such committee shall not remove said cabinets or any of the specimens therein deposited from the rooms in which they shall be deposited by the regents of the university.

See also by-laws 19–20, pp. 485–86, museum exchanges and duplicate specimens.)

§ 23. Collections made by the staff: Any scientific collection made by a member of the museum staff during his term of office shall, unless otherwise authorized by resolution of the regents, belong to the State and form part of the State museum.

§ 24. Institutions in the university: The institutions of the university shall include all institutions of higher education which are now or may hereafter be incorporated in this State, and such other libraries, museums, or other institutions for higher education as may, in conformity with the ordinances of the regents, after official inspection, be admitted to or incorporated by the university. The regents may exclude from such membership any institution failing to comply with law or with any ordinance or rule of the university.

(See also *Consolidated School Law*, 1894, tit. 8, § 26, p. 425, on academic departments of union schools; tit. 13, § 7, on libraries, p. 435; and ordinances 1–3, pp. 465–66, on incorporation and admission; 8–9, pp. 467–68, on limited charters and stock or business corporations; 13–14, pp. 468–69, on academies and grading; 22, p. 471, on delinquent and dormant institutions; 23, p. 471, on special requirements in English.)

§ 25. Visitation and reports: The regents or their committees or officers shall visit, examine into, and inspect the condition and operations of every institution and department in the university, and require of each an annual report verified by oath of its presiding officer, and giving information concerning trustees, faculty, students, instruction, equipment, methods, and operations, with such other information and in such form as may be prescribed by the regents, who shall annually report to the legislature the condition of the university and of each of its institutions and departments, with any further information or recommendations which they shall deem it desirable to submit; and such parts of their report as they shall deem necessary for use in advance of the annual volume may be printed by the State printer as bulletins. For refusal or continued neglect on the part of any institution in the university to make the report required by this section, or for violation of any law, the regents may suspend the charter or any of the rights and privileges of such institution.

(Academic departments of union free schools are subject to the visitation and control of regents as to their educational work, *Consolidated School Law*, 1894, tit. 8, § 26–27, pp. 425–26. This section supersedes provision as to visitation in L. 1882, ch. 367, § 27.

See also § 41, p. 417, and ordinances 19–22, pp. 470–71, on reports; by-law 25, p. 486, requiring annual inspection.)

§ 26. Apportionment of State money: The treasurer shall pay annually, on warrant of the comptroller, $12,000 from the income of the literature fund, $34,000 from the income of the United States deposit fund, and $60,000 from the general fund, according to an apportionment to be made for the benefit of the academies of the university by the regents, in accordance with their rules and authenticated by their seal, provided that the said $60,000 from the general fund shall be used only for academic departments of union schools, and that no academy shall share in such apportionment unless the regents shall be satisfied by personal inspection by one of their officers, the necessary expenses of which inspection may be paid out of said money, that it has suitable provision for buildings, furniture, apparatus, library, and collections, and has complied with all their requirements, and provided that books, apparatus, scientific collections, or other educational equipment furnished by the State or bought with money apportioned from State funds shall be subject to return to the regents whenever the charter of the school shall be revoked or it shall discontinue its educational operations.

(Capital of literature and United States deposit funds must be kept inviolate; revenue of the literature fund must be applied to support of academies; no State funds to be paid to any institution of learning "wholly or in part under the control or direction of any religious denomination or in which any denominational tenet or doctrine is taught,' *Constitution*, art. 9, § 3–4, p. 401; L. 1873, ch. 642, § 7. Literature fund, and how invested, R. S., pt. 1, ch. 9, tit. 3, § 1–2. L. 1895, ch. 341, provides for an additional $100 to each school of academic grade and for increasing the fund each year to keep pace with growth in number of schools and students. This now requires over $250,000 annually. Establishment and regulation of academic departments of union schools, *Consolidated school law*, 1894, ch. 556, tit. 8, § 15, sub§ 10; tit. 8, §§ 26–27, 35, pp. 425–427. Other details as to such expenditures, laws of 1873, ch. 642.

See also laws of 1895, ch. 341, § 2, p. 427, and ordinances 30–41, pp. 472–475, regulating grants of money by regents.)

§ 27. Charters: The regents may, by an instrument under their seal and recorded in their office, incorporate any university, college, academy, library, museum, or other institution or association for the promotion of science, literature, art, history, or other department of knowledge, under such name, with such number of trustees or other managers, and with such powers, privileges, and duties, and subject to such limitations and restrictions in all respects as the regents may prescribe in conformity to law. (As amended by laws of 1895, ch. 859, § 2.)

(See also Constitution, art. 8, § 1, p. 421; *Membership corporations law*, 1895, ch. 559, § 30, p. 421, which repeals all powers to incorporate scientific, literary, and similar institutions or associations except by the regents under this section; and ordinances 1–2, p. 465, on charters; 8, p. 467; 10, p. 468; 24, p. 471, withholding charters after vote; 55, p. 478, limitation on granting degrees.

An academy incorporated for the promotion of literature and authorized to educate males and females, may establish separate departments for each, and, under laws of 1840, ch. 318, and laws of 1841, ch. 261, take and hold real estate in trust, to be used for the benefit of either department. Adams *v.* Perry, N. Y. 43: 487.)

§ 28. Provisional charters: On evidence satisfactory to the regents that the conditions for an absolute charter will be met within a prescribed time, they may grant a provisional charter which shall be replaced by an absolute charter when the conditions have been fully met; otherwise, after the specified time, on notice

from the regents to this effect, the provisional charter shall terminate and become void and shall be surrendered to the regents. No such provisional charter shall give power to confer degrees.

(Ordinance 32, p. 473, forbids grants from academic fund.)

§ 29. Change of name of charter: The regents may, at any time, for sufficient cause, by an instrument under their seal and recorded in their office, change the name, or alter, suspend, or revoke the charter or incorporation of any institution which they might incorporate under § 27, if subject to their visitation or chartered or incorporated by the regents or under a general law; provided, that, unless on unanimous request of the trustees of the institution, no name shall be changed and no charter shall be altered, nor shall any rights or privileges thereunder be suspended or repealed by the regents till they have mailed to the usual address of every trustee of the institution concerned at least 30 days' notice of a hearing, when any objections to the proposed change will be considered, and till ordered by vote at a meeting of the regents for which the notices have specified that action is to be taken on the proposed change. (As amended by laws of 1895, ch. 859, § 3.)

(For change of name by court see Code of Civil Procedure, §§ 2411-2418.)

§ 30. Dissolution and rechartering: Under like restrictions the regents may dissolve any such educational corporation, whether with or without a capital stock, and whether incorporated by the regents or under a general or by a special law, and make such disposition of the property of such corporation remaining after payment of its debts and liabilities as the regents shall deem just and equitable and best promoting public interests. The regents may also, after a similar hearing, issue to any such educational corporation a new charter which shall take the place in all respects of that under which it has been operating.

(Procedure for dissolution of incorporated academies having capital stock, L. 1889, ch. 25, pp. 423-425. Certain educational corporations excepted from code provisions for dissolution, Code of Civil Procedure, §§ 1804, 2431.)

§ 31. Suspension of operations: If any institution in the university shall discontinue its educational operations without cause satisfactory to the regents, it shall surrender its charter to them, subject, however, to restoration whenever arrangements satisfactory to the regents are made for resuming its work.

(See also ordinances 11, p. 468, on suspension because of leasing without written approval of regents; 19, p. 470, on reports; 22, p. 471, on delinquents.)

§ 32. Conditions of incorporation: No institution shall be given power to confer degrees in this State unless it shall have resources of at least $500,000; and no institution for higher education shall be incorporated without suitable provision, approved by the regents, for buildings, furniture, educational equipment, and proper maintenance. No institution shall institute or have any faculty or department of higher education in any place or be given power to confer any degree not specifically authorized by its charter; and no institution of higher education shall be incorporated under the provisions of any general act authorizing the formation of a corporation without grant of a special charter on individual application, and no corporation shall, under authority of any general act, extend its business to include establishing or carrying on any such institutions.

(See also ordinances 2, p. 465, on incorporation; 55, p. 478, limiting degree-conferring powers.)

§ 33. Prohibitions: No individual, association, or corporation not holding university or college degree-conferring powers by special charter from the legislature of this State or from the regents, shall confer any degrees, nor after January 1, 1893, shall transact business under, or in any way assume the name university or college, till it shall have received from the regents, under their seal, written permission to use such name, and no such permission shall be granted by the regents, except on favorable report after personal inspection of the institution by an officer of the university. No person shall buy, sell, or fraudulently or illegally make or alter,

give, issue, or obtain any diploma, certificate, or other instrument purporting to confer any literary, scientific, professional, or other degree, or to constitute any license, or to certify to the completion in whole or in part of any course of study in any university, college, academy, or other educational institution. No diploma or degree shall be conferred in this State except by a regularly organized institution of learning registered by the regents as not violating any requirement of law or of the university ordinances, nor shall any person with intent to deceive, falsely represent himself to have received any such degree or credential, nor shall any person append to his name any letters in the same form registered by the regents as entitled to the protection accorded to university degrees, unless he shall have received from a duly authorized institution the degree for which the letters are registered. Counterfeiting, or falsely or without authority making or altering in a material respect, any such credential issued under seal shall be a felony, and personating another by attempting to take an examination in his name or procuring any person thus falsely to personate another, or otherwise attempting to secure the record of having passed such examination in violation of the university ordinances, or any other violation of this section shall be a misdemeanor; and any person who aids or abets another, or advertises or offers himself to violate the provisions of this section, shall be liable to the same penalties. (As amended by laws of 1895, ch. 859, § 4.)

(See also ordinances 5–6, pp. 466–467, defining the word "college;" 21, p. 471, on violations of the university law; 52, p. 477, all credentials subject to cancellation for cause; 58, p. 478, for list of degrees protected by this section.)

§ 34. Powers of trustees of institutions in the university: The trustees of every corporation created for educational purposes and subject to visitation by the regents, unless otherwise provided by law or by its charter, may—

1. Number and quorum: Fix the number of trustees which shall not exceed 25, nor be less than five. If any institution has more than five trustees, the body that elects, by a two-thirds vote after notice of the proposed action in the call for a meeting, may reduce the number to not less than five by abolishing the office of any trustee which is vacant and filing in the regents' office a certified copy of the action. A majority of the whole number shall be a quorum.

2. Executive committee: Elect an executive committee of not less than seven, who, in intervals between meetings of the trustees, may transact such business of the corporation as the trustees may authorize, except to grant degrees or to make removals from office.

3. Meetings and seniority: Meet on their own adjournment or when required by their by-laws, and as often as they shall be summoned by their chairman, or in his absence by the senior trustee, on written request of three trustees. Seniority shall be according to the order in which the trustees are named in the charter or subsequently elected. Notice of the time and place of every meeting shall be mailed not less than five nor more than 10 days before the meeting to the usual address of every trustee.

4. Vacancies and elections: Fill any vacancy occurring in the office of any trustee by electing another for the unexpired term. The office of any trustee shall become vacant on his death, resignation, refusal to act, removal from office, expiration of his term, or any other cause specified in the charter. If any trustee shall fail to attend three consecutive meetings without written excuse accepted as satisfactory by the trustees not later than the third consecutive meeting from which he has been absent, he shall be deemed to have resigned, and the vacancy shall be filled. Any vacancy in the office of trustee continuing for more than one year, or any vacancy reducing the number of trustees to less than two-thirds of the full number may be filled by the regents. No person shall be ineligible as a trustee by reason of sex.

(Salaried officers, other than executive or financial, ineligible as trustees, see ordinance 16, p. 470.)

5. Property holding: Take and hold by gift, grant, devise, or bequest in their own right or in trust for any purpose comprised in the objects of the corporation, such additional real and personal property beyond such as shall be authorized by their charter or by special or general statue, as the regents shall authorize within one year after the delivery of the instrument or probate of the will, giving, granting, devising, or bequeathing such property and such authority given by the regents shall make any such gift, grant, devise, or bequest operative and valid in law.

(Enlargement of limitations upon amount of property that membership educational corporations may hold, general corporation law, 1892, § 12, p. 422; laws of 1889, ch. 191. As to property holding generally, see general corporation law, 1892, § 10-14.)

6. Control of property: Buy, sell, mortgage, let, and otherwise use and dispose of its property as they shall deem for the best interests of the institution; and also to lend or deposit, or to receive as a gift, or on loan or deposit, literary, scientific, or other articles, collections, or property pertaining to their work; and such gifts, loans, or deposits may be made to or with the university or any of its institutions by any person, or by legal vote of any board of trustees, corporation, association, or school district, and any such transfer of property, if approved by the regents, shall, during its continuance, transfer responsibility therefor to the institution receiving it, which shall also be entitled to receive any money, books, or other property from the State or other sources to which said corporation, association, or district would have been entitled but for such transfer.

(Incorporated college may maintain waterworks system, L. 1895, ch. 630.)

7. Officers and employees: Appoint and fix the salaries of such officers and employees as they shall deem necessary, who, unless employed under special contract, shall hold their offices during the pleasure of the trustees; but no trustee shall receive compensation as such.

(See also ordinances 16–18.)

8. Removals and suspensions: Remove or suspend from office by vote of a majority of the entire board any trustee, officer, or employee engaged under special contract, on examination and due proof of the truth of a written complaint by any trustee, of misconduct, incapacity, or neglect of duty; provided that at least one week's previous notice of the proposed action shall have been given to the accused and to each trustee.

9. Degrees and credentials: Grant such degrees and honors as are specifically authorized by their charter, and in testimony thereof give suitable certificates and diplomas under their seal; and every certificate and diploma so granted shall entitle the conferee to all privileges and immunities, which by usage or statute are allowed for similar diplomas of corresponding grade granted by any institution of learning.

(See also ordinances 54–58, 60, 61, 63.)

10. Rules: Make all by-laws, ordinances, and rules necessary and proper for the purpose of the institution and not inconsistent with law or any ordinance or rule of the university; but no ordinance or rule by which more than a majority vote shall be required for any specified action by the trustees shall be amended, suspended, or repealed by a smaller vote than that required for action thereunder.

(Power to make by-laws, general corporation law, 1892, § 11, 29.)

§ 35. Public and free libraries and museums: All provisions of sections 35 to 51 shall apply equally to libraries, museums, and to combined libraries and museums, and the word library shall be construed to include reference and circulating libraries and reading rooms.

(See also general municipal law, 1892, § 24, as amended by laws of 1896, ch. 576.

§ 36. Establishment: By majority vote at any election any city, village, town, school district, or other body authorized to levy and collect taxes, or by vote of its common council, or by action of a board of estimate and apportionment, or other proper authority, any city, or by vote of its trustees, any village, may establish and maintain a free public library, with or without branches, either by itself or in connection with any other body authorized to maintain such library. Whenever 25 taxpayers shall so petition the question of providing library facilities shall be voted on at the next election or meeting at which taxes may be voted, provided that due public notice shall have been given of the proposed action. (As amended by laws of 1895, ch. 859, § 5.)

(Establishment of free public library by town, city, or village, general municipal law, § 24.)

§ 37. Subsidies: By similar vote money may be granted toward the support of libraries not owned by the public but maintained for its welfare and free use; provided that such libraries shall be subject to the inspection of the regents and registered by them as maintaining a proper standard, that the regents shall certify what number of the books circulated are of such a character as to merit a grant of public money, and that the amount granted yearly to libraries on the basis of circulation shall not exceed 10 cents for each volume of the circulation thus certified by the regents.

(Laws of 1886, ch. 666, and laws 1887, ch. 313, authorizing local subsidies to libraries, were repealed by the membership corporation law, 1895, ch. 559. This section now contains the only provision of law for subsidies to libraries.

See also ordinance 67.)

§ 38. Taxes: Taxes in addition to those otherwise authorized may be voted by any authority named in § 36 and for any purpose specified in sections 36 and 37, and shall, unless otherwise directed by such vote, be considered as annual appropriations therefor till changed by further vote, and shall be levied and collected yearly, or as directed, as are other general taxes; and all money received from taxes or other sources for such library shall be kept as a separate library fund and expended only under direction of the library trustees on properly authenticated vouchers.

§ 39. Trustees: Such libraries shall be managed by trustees who shall have all the powers of trustees of other educational institutions of the university as defined in this act; provided, unless otherwise specified in the charter, that the number of trustees shall be five; that they shall be elected by the legal voters, except that in cities they shall be appointed by the mayor, with the consent of the common council, from citizens of recognized fitness for such position; that the first trustees determine by lot whose term of office shall expire each year, and that a new trustee shall be elected or appointed annually to serve for five years.

§ 40. Incorporation: Within one month after taking office, the first board of trustees shall apply to the regents for a charter in accordance with the vote establishing the library.

(See also ordinance 7, for property minimum.)

§ 41. Reports: Every library or museum which receives State aid or enjoys any exemption from taxation or other privilege not usually accorded to business corporations shall make the report required by § 25 of this act, and such report shall relieve the institution from making any report now required by statute or charter to be made to the legislature, or to any department, court, or other authority of the State. These reports shall be summarized and transmitted to the legislature by the regents with the annual reports of the State library and State museum.

(See also ordinance 19.)

§ 42. Use: Every library established under § 36 of this act shall be forever free to the inhabitants of the locality which establishes it, subject always to rules of the

library trustees, who shall have authority to exclude any person who wilfully violates such rules; and the trustees may, under such conditions as they think expedient, extend the privileges of the library to persons living outside such locality. (As amended by laws of 1895, ch. 859, § 6.)

§ 43. Injuries to property: Whoever intentionally injures, defaces, or destroys any property belonging to or deposited in any incorporated library, reading room, museum, or other educational institution, shall be punished by imprisonment in a State prison for not more than three years, or in a county jail for not more than one year, or by a fine of not more than $500, or by both such fine and imprisonment.

(To like effect, Penal Code, pp. 647-648.)

§ 44. Detention: Whoever wilfully detains any book, newspaper, magazine, pamphlet, manuscript, or other property belonging to any public or incorporated library, reading room, museum, or other educational institution, for 30 days after notice in writing to return the same, given after the expiration of the time which by the rules of such institution such article or other property may be kept, shall be punished by a fine of not less than one nor more than $25, or by imprisonment in the jail not exceeding six months, and the said notice shall bear on its face a copy of this section.

§ 45. Transfer of libraries: Any corporation, association, school district or combination of districts may, by legal vote duly approved by the regents, transfer the ownership and control of its library, with all its appurtenances, to any public library in the university, and thereafter said public library shall be entitled to receive any money, books, or other property from the State or other sources to which said corporation, association, or district would have been entitled but for such transfer, and the trustees or body making the transfer shall thereafter be relieved of all responsibility pertaining to property thus transferred.

(See also ordinance 68.)

§ 46. Local neglect: If the local authorities of any library supported wholly or in part by State money, fail to provide for the safety and public usefulness of its books, the regents shall in writing notify the trustees of said library what is necessary to meet the State's requirements, and on such notice all its rights to further grants of money or books from the State shall be suspended until the regents certify that the requirements have been met; and if said trustees shall refuse or neglect to comply with such requirements within 60 days after service of such notice, the regents may remove them from office, and thereafter all books and other library property wholly or in part paid for from State money shall be under the full and direct control of the regents who, as shall seem best for public interests, may appoint new trustees to carry on the library, or may store it or distribute its books to other libraries.

§ 47. Loans of books from State: Under such rules as the regents may prescribe, they may lend from the State library, duplicate department, or from books specially given or bought for this purpose, selections of books for a limited time to any public library in this State under visitation of the regents, or to any community not yet having established such library, but which has conformed to the conditions required for such loans.

§ 48. Advice and instruction from State library officers: The trustees or librarian or any citizen interested in any public library in this State shall be entitled to ask from the officers of the State library any needed advice or instruction as to library building, furniture and equipment, government and service, rules for readers, selecting, buying, cataloguing, shelving, lending books, or any other matter pertaining to the establishment, reorganization, or administration of a public library. The regents may provide for giving such advice and instruction either personally or through printed matter and correspondence, either by the State library staff or by a library commission of competent experts appointed by the regents to serve without salary. The regents may, on request, select or buy

books, or furnish[1] instead of money apportioned, or may make exchanges or loans through the duplicate department of the State library. Such assistance shall be free to residents of this State as far as practicable, but the regents may, in their discretion, charge a proper fee to nonresidents or for assistance of a personal nature or for other reason not properly an expense to the State, but which may be authorized for the accommodation of users of the library.

§ 49. Use of fees and fines: The regents may use receipts from fees, fines, gifts from private sources, or sale of regents' bulletins and similar printed matter, for buying books or for any other proper expenses of carrying on their work.

(By-law 16 requires report to legislature of all receipts and payments.)

§ 50. Apportionment of public library money: Such sum as shall have been appropriated by the legislature as public library money shall be paid annually by the treasurer, on the warrant of the comptroller, from the income of the United States deposit fund, according to an apportionment to be made for the benefit of free libraries by the regents in accordance with their rules and authenticated by their seal; provided that none of this money shall be spent for books except those approved or selected and furnished by the regents; that no locality shall share in the apportionment unless it shall raise and use for the same purpose not less than an equal amount from taxation or other local sources; that for any part of the apportionment not payable directly to the library trustees the regents shall file with the comptroller proper vouchers showing that it has been spent in accordance with law exclusively for books for free libraries or for proper expenses incurred for their benefit; and that books paid for by the State shall be subject to return to the regents whenever the library shall neglect or refuse to conform to the ordinances under which it secured them.

(See also ordinances 37–45 for rules governing these grants.)

§ 51. Abolition: Any library established by public vote or action of school authorities, or under § 36 of this act, may be abolished only by a majority vote at a regular annual election, ratified by a majority vote at the next annual election. If any such library is abolished its property shall be used first to return to the regents, for the benefit of other public libraries in that locality, the equivalent of such sums as it may have received from the State or from other sources as gifts for public use. After such return any remaining property may be used as directed in the vote abolishing the library, but if the entire library property does not exceed in value the amount of such gifts it may be transferred to the regents for public use, and the trustees shall thereupon be freed from further responsibility. No abolition of a public library shall be lawful till the regents grant a certificate that its assets have been properly distributed and its abolition completed in accordance with law. (As amended by laws of 1895, ch. 859, § 7.)

§ 52. Laws repealed: Of the laws enumerated in the schedule hereto annexed that portion specified in the last column is repealed.

§ 53. Saving clause: The repeal of a law or any part of it by this act shall not affect or impair any act done or right accruing, accrued or acquired, or liability, penalty, forfeiture, or punishment incurred prior to such repeal, under or by virtue of any law so repealed, but the same may be asserted, enforced, prosecuted, or inflicted as fully and to the same extent as if such law had not been repealed; and all actions and proceedings, civil or criminal, commenced under or by virtue of the laws so repealed and pending at the time of such repeal, may be prosecuted and defended to final effect in the same manner as they might under the laws then existing, unless it shall be otherwise specially provided by law.

(Similar and other saving clauses, statutory construction law, 1892, § 31–33.)

§ 54. Construction: The provisions of this act, so far as they are substantially the same as those of the laws herein repealed, shall be construed as a continuation

[1] So in the original.

of such laws, modified or amended according to the language employed in this act, and not as new enactments. Repeals in this act shall not revive any law repealed by any law hereby repealed, but shall include all laws amendatory of the laws hereby repealed. References in laws not repealed to provisions of law incorporated in this chapter and repealed shall be construed as applying to the provisions so incorporated. Nothing in this act shall be construed to repeal any provision of the criminal or penal code.

§ 55. To take effect: This act shall take effect immediately.

SCHEDULE OF LAWS REPEALED.

Laws of—	Chapter.	Section.	Laws of—	Chapter.	Section.
Rev. laws of 1813	59	All.	1852	366	1.
Rev. stat., pt. 1	5, tit. 3	5.	1853	184	All.
Rev. stat., pt. 1	9, tit. 8	6, 7, 8.	1854	80	1.
Rev. stat., pt. 1	15, tit. 1	All.	1855	91	1, 2.
1815	207	All.	1855	50	All.
1818	276	All.	1855	410	1, 2.
1832	8	3, 4.	1855	471	1, 2, 3.
1834	140	2.	1856	168	1, 2, 3.
1835	34	3.	1856	54	All.
1835	123	2, 3.	1857	355	1, 2, 3.
1836	142	1.	1857	527	All.
1838	237	8, 9.	1858	81	1, 2.
1839	226	All.	1859	395	1, 2, 3.
1839	315	1, 2.	1859	426	1.
1840	245	1, 2.	1860	518	1, 2.
1840	246	All.	1865	697	All.
1840	381	3.	1868	179	1, 2.
1842	142	All.	1869	774	All.
1842	149	1, 3, 4, 5, 6.	1870	60	1, 2.
1843	85	1, 4.	1870	51	All.
1844	254	1, 2, 3.	1870	557	1, 2, 3, 4, 5.
1844	255	1, 3, 5, 6, 7.	1871	711	1, 2, 3.
1845	179	1, 3.	1872	746	1, 2, 3, 4, 5.
1845	85	1, 3.	1873	642	4.
1846	132	1, 2, 3, 4, 5.	1875	176	All.
1847	190	1.	1875	372	All.
1847	212	1, 2.	1876	132	1, 2.
1848	202	2, 3.	1877	163	All.
1848	372	All.	1879	289	All.
1849	175	1, 2, 3, 4, 5.	1880	514	1.
1849	266	All.	1881	120	All.
1850	360	1, 2, 3.	1881	679	All.
1851	396	All.	1886	493	All.
1851	536	1, 3.	1887	652	All.
1851	544	All.	1889	529	All.

PROFESSIONAL AND TECHNICAL TRAINING AND EXAMINATIONS.

PRACTICE OF LAW.

[Laws of 1895, ch. 946.]

§ 57. Rules, how changed: The rules established by the court of appeals, touching the admission of attorneys and counselors to practice in the courts of record of the State, shall not be changed or amended, except by a majority of the judges of that court. A copy of each amendment to such rules must, within five days after it is adopted, be filed in the office of the secretary of state, who must transmit a printed copy thereof to the clerk of each county, and to the presiding justice of the appellate division of the supreme court, in each judicial department, and also cause the same to be published in the next ensuing volume of the session laws.

LAW STUDENT EXAMINATIONS.

[Rules 5 and 6 of the court of appeals, adopted October 22, 1894; to take effect January 1, 1895.]

The university is responsible only for the preliminary general education of law students. The full rules for admission of attorneys to the bar may be obtained of the clerk of the court of appeals, capitol, Albany, N. Y.

Rule 5, § 3. Applicants who are not graduates of a college or university or members of the bar as above described, shall, before entering upon the clerkship or

attendance at a law school herein prescribed, or within one year thereafter, have passed an examination conducted under the authority and in accordance with the ordinances and rules of the University of the State of New York, in English composition, advanced English, first year Latin, arithmetic, algebra, geometry, United States and English history, civics and economics, or in their substantial equivalents as defined by the rules of the university, and shall have filed a certificate of such fact signed by the secretary of the university with the clerk of the court of appeals, whose duty it shall be to return to the person named therein a certified copy of the same showing the date of such filing. The regents may accept as the equivalent of and substitute for the examination in this rule prescribed either, first, a certificate properly authenticated, of having successfully completed a full year's course of study in any[1] college or university; second, a certificate properly authenticated,[2] of having satisfactorily completed a three years' course of study in any institution registered[3] by the regents as maintaining a satisfactory academic standard; or, third, a regents' diploma.[4] The regents' certificate above

[1] The regents count forty weeks as a full academic year. If the candidate has passed successfully in a registered institution all the examinations for a full year's work, the question of actual attendance is not raised.

[2] The court and the regents both refuse to recognize as a college or a university an institution which, though taking the name, in reality does work of a lower grade. Colleges of medicine, pharmacy, dentistry, business colleges, and all similar professional and technical schools are not registered as colleges. By college is understood an institution which requires for admission four years of academic or high school preparation in addition to the preacademic or grammar school studies, and which gives four full years of college instruction as a condition of graduation. Institutions with courses equivalent to three years of college work are sometimes registered when they require four full years of academic preparation, as are other institutions that admit after three years of preparation but that require a minimum of four years of college work. In all cases the total of academic and college work must be not less than seven years in advance of grammar school studies, or the institution can not be registered as giving a full college course. The court also refuses to recognize as "study in a college," work in an academic or lower department conducted and supervised by a college. To be accepted as an equivalent by the regents the work must be of college grade.

[3] Besides the institutions of higher education in the State of New York inspected by the regents, institutions in other States and countries are registered on reliable information that the minimum standard is fully met. If credentials are offered from any institution not yet registered (or rejected as below the registration standard) the necessary investigation will be made as promptly as possible and the candidate notified whether the credentials can be accepted. The frequent changes in organization and standards, and the practical difficulties of recording the grade of work outside regularly organized institutions, have made necessary the rule that candidates instructed by private tutors or in unregistered private schools, however excellent, can not be excused from taking the examinations by presenting certificates similar to those accepted from regularly organized and registered institutions.

[4] The term "regents' diploma" refers not alone to the classical, English, and academic diplomas which bear that specific name, but to all graduating credentials, whether called certificates or diplomas, which certify from the university to the completion of a full academic course. As some candidates prefer to pass examinations in the higher branches more recently studied rather than in more elementary subjects in which they have become rusty, they are allowed to select from the entire list of over 70 studies in which the regents examine, provided that the total academic counts equal a full course.

prescribed shall be deemed to take effect as of the date of the completion of the regents' examination, as the same shall appear upon said certificate.

PRACTICE OF MEDICINE.

[Public health law, 1893, ch. 661, art. 8, as amended to June, 1897.]

Definitions as used in this article:

University means University of the State of New York.

Regents means board of regents of the University of the State of New York.

Board means a board of medical examiners of the State of New York.

Medical examiner means a member of the board of medical examiners of the State of New York.

Medical school means any medical school, college, or department of a university, registered by the regents as maintaining a proper medical standard and as legally incorporated.

Medicine means medicine and surgery.

Physician means physician and surgeon.

§ 140. Qualifications: No person shall practice medicine after September 1, 1891, unless previously registered and legally authorized or unless licensed by the regents and registered as required by this article; nor shall any person practice medicine who has ever been convicted of a felony by any court, or whose authority to practice is suspended or revoked by the regents on recommendation of a State board.

§ 141. State boards of medical examiners: There shall continue to be three separate State boards of medical examiners of seven members each, each of whom shall hold office for three years from August 1 of the year in which appointed. One board shall represent the Medical Society of the State of New York, one the Homeopathic Medical Society of the State of New York, and one the Eclectic Medical Society of the State of New York. Each of these three societies shall at each annual meeting nominate twice the number of examiners to be appointed in that year on the board representing it. The names of such nominees shall be annually transmitted under seal by the president and secretary, prior to May 1, to the regents, who shall, prior to August 1, appoint from such lists the examiners required to fill any vacancies that will occur from expiration of term on August 1. Any other vacancy, however occurring, shall likewise be filled by the regents for the unexpired term. Each nominee before appointment shall furnish to the regents proof that he has received the degree of doctor of medicine from some registered medical school and that he has legally practiced medicine in this State for at least five years. If no nominees are legally before them from a society the regents may appoint from members in good standing of such society without restriction. The regents may remove any examiner for misconduct, incapacity, or neglect of duty.

(See also ordinance 47.)

§ 142. Certificate of appointment; oath; powers: Every medical examiner shall receive a certificate of appointment from the regents, and before beginning his term of office shall file with the secretary of state the constitutional oath of office. Each board, or any committee thereof, may take testimony and proofs concerning all matters within its jurisdiction. Each board may, subject to the regents' approval, make all by-laws and rules not inconsistent with law needed in performing its duty; but no by-law or rule by which more than a majority vote is required for any specified action by the board shall be amended, suspended, or repealed by a smaller vote than that required for action thereunder.

§ 145. Admission to examination: The regents shall admit to examination any andidate who pays a fee of $25 and submits satisfactory evidences, verified by oath, if required, that he—

1. Is more than 21 years of age.

2. Is of good moral character.

3. Has the general education required preliminary to receiving the degree of bachelor or doctor of medicine in this State.

4. Has studied medicine not less than four full school years of at least nine months each, including four satisfactory courses of at least six months each in four different calendar years in a medical school registered as maintaining at the time a satisfactory standard. New York medical schools and New York medical students shall not be discriminated against by the registration of any medical school out of the State whose minimum graduation standard is less than that fixed by statute for New York medical schools. The regents may, in their discretion, accept as the equivalent for any part of the third and fourth requirement, evidence of five or more years' reputable practice, provided that such substitution be specified in the license.

5. Has either received the degree of bachelor or doctor of medicine from some registered medical school, or a diploma or license conferring full right to practice medicine in some foreign country. The degree of bachelor or doctor of medicine shall not be conferred in this State before the candidate has filed with the institution conferring it the certificate of the regents that before beginning the first annual medical course counted toward the degree unless matriculated conditionally as hereinafter specified (three years before the date of the degree), he had either graduated from a registered college or satisfactorily completed a full course in a registered academy or high school; or had a preliminary education considered and accepted by the regents as fully equivalent; or held a regents' medical student certificate, granted before this act took effect; or had passed regents' examinations as hereinafter provided. A medical school may matriculate conditionally a student deficient in not more than one year's academic work or 12 counts of the preliminary education requirement, provided the name and deficiency of each student so matriculated be filed at the regents' office within three months after matriculation, and that the deficiency be made up before the student begins the second annual medical course counted toward the degree.

NOTES ON THE LAW AS TO ADMISSION.

The regents will accept as fully equivalent to the required academic course any one of the following:

a. A certificate of having successfully completed at least one full year's course of study in the collegiate department of any college or university, registered by the regents as maintaining a satisfactory standard.

b. A certificate of having passed in a registered institution examinations equivalent to the full collegiate course of the freshman year or to a completed academic course.

(Three full academic years of satisfactory work may be accepted as a high-school course till August 1, 1896, when four full academic years will be required.)

c. Regents' passcards for any 48 academic counts or any regent's diploma.

d. A certificate of graduation from any registered gymnasium in Germany, Austria, or Russia.

e. A certificate of the successful completion of a course of five years in a registered Italian ginnasio and three years in a liceo.

f. The bachelor's degree in arts or science, or substantial equivalents from any registered institution in France or Spain.

g. Any credential from a registered institution or from the government in any State or country which represents the completion of a course of study equivalent to graduation from a registered New York high school or academy or from a registered Prussian gymnasium.

§ 146. Questions: Each board shall submit to the regents, as required, lists of suitable questions for thorough examination in anatomy, physiology and hygiene, chemistry, surgery, obstetrics, pathology and diagnosis, and therapeutics, including practice and materia medica. From these lists the regents shall prepare question papers for all these subjects, which at any examination shall be the same for all candidates, except that in therapeutics, practice, and materia medica all the questions submitted to any candidate shall be chosen from those prepared by the board selected by that candidate, and shall be in harmony with the tenets of that school as determined by its State board of medical examiners.

§ 147. Examinations and reports: Examinations for license shall be given in at least four convenient places in this State and at least four times annually, in accordance with the regents' rules, and shall be exclusively in writing and in English. Each examination shall be conducted by a regent's examiner, who shall not be one of the medical examiners. At the close of each examination the regent's examiner in charge shall deliver the questions and answer papers to the board selected by each candidate or to its duly authorized committee, and such board, without unnecessary delay, shall examine and mark the answers and transmit to the regents an official report, signed by its president and secretary, stating the standing of each candidate in each branch, his general average, and whether the board recommends that a license be granted. Such report shall include the questions and answers, and shall be filed in the public records of the university. If a candidate fails on first examination he may, after not less than six months' further study, have a second examination without fee. If the failure is from illness or other cause satisfactory to the regents, they may waive the required six months' study.

§ 148. Licenses: On receiving from a State board an official report that an applicant has successfully passed the examinations and is recommended for license, the regents shall issue to him, if in their judgment he is duly qualified therefor, a license to practise medicine. Every license shall be issued by the university under seal, and shall be signed by each acting medical examiner of the board selected and by the officer of the university who approved the credential which admitted the candidate to examination, and shall state that the licensee has given satisfactory evidence of fitness as to age, character, preliminary and medical education, and all other matters required by law, and that after full examination he has been found properly qualified to practise. Applicants examined and licensed by other State examining boards registered by the regents as maintaining standards not lower than those provided by this article, and applicants who matriculated in a New York State medical school before June 5, 1890, and who receive the degree M. D. from a registered medical school before August 1, 1895, may, without further examination, on payment of $10 to the regents and on submitting such evidence as they may require, receive from them an indorsement of their licenses or diplomas conferring all rights and privileges of a regent's license issued after examination.

If any person whose registration is not legal because of some error, misunderstanding, or unintentional omission shall submit satisfactory proof that he had all requirements prescribed by law at the time of his imperfect registration and was entitled to be legally registered, he may, on unanimous recommendation of a State board of medical examiners, receive from the regents under seal a certificate of the facts, which may be registered by any county clerk, and shall make valid the previous imperfect registration.

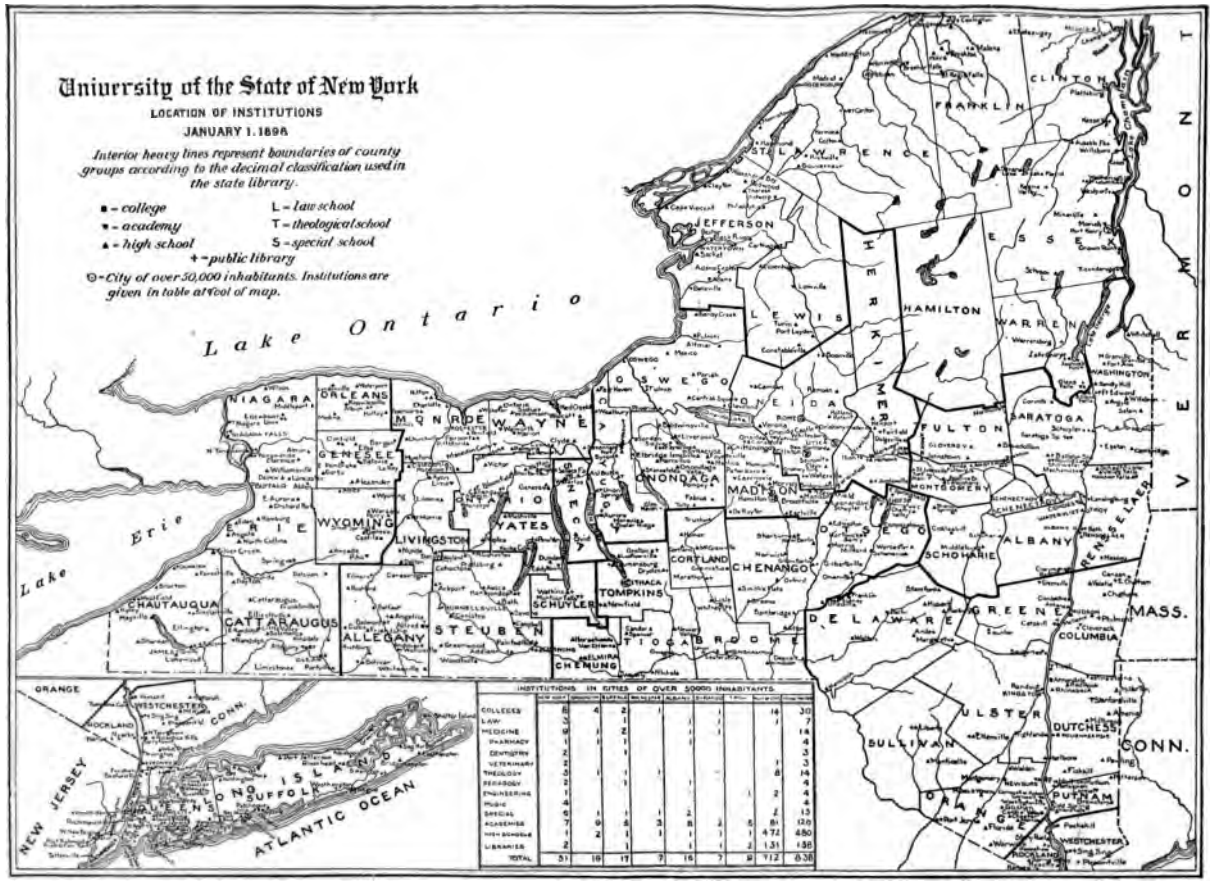
Before any license is issued it shall be numbered and recorded in a book kept in the regents' office, and its number shall be noted in the license. This record shall be open to public inspection, and in all legal proceedings shall have the same weight as evidence that is given to a record of conveyance of land.

§ 153. Penalties and their collection: Any person who, not being then lawfully authorized to practise medicine within this State and so registered according to law, shall practise medicine within this State without lawful registration or in violation of any provision of this article; and any person who shall buy, sell, or fraudulently obtain any medical diploma, license, record, or registration, or who shall aid or abet such buying, selling, or fraudulently obtaining, or who shall practise medicine under cover of any medical diploma, license, record, or registration illegally obtained, or signed, or issued unlawfully or under fraudulent representations or mistake of fact in a material regard, or who, after conviction of a felony, shall attempt to practise medicine, or shall so practise; and any person who shall append the letters M. D. to his or her name, or shall assume or advertise the title of doctor (or any title which shall show or tend to show that the person assuming or advertising the same is a practitioner of any of the branches of medicine) in such a manner as to convey the impression that he or she is a legal practitioner of medicine or of any of its branches without having legally received the medical degree, or without having received a license which constituted at the time an authority to practise medicine under the laws of this State then in force, shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not more than $250 or imprisonment for six months for the first offense, and on conviction of any subsequent offense by a fine of not more than $500 or imprisonment for not less than one year, or by both fine and imprisonment. Any person who shall practise medicine under a false or assumed name, or who shall falsely personate another practitioner of a like or different name, shall be guilty of a felony. When any prosecution under this article is made on the complaint of any incorporated medical society of the State or any county medical society of such county entitled to representation in a State society, the fines when collected shall be paid to the society making the complaint, and any excess of the amount of fines so paid over the expense incurred by the said society in enforcing the medical laws of this State shall be paid at the end of the year to the country treasurer. (As amended by laws of 1895, ch. 398.)

PRACTICE OF DENTISTRY.

[Public health law, 1893, ch. 661, art. 9, as amended to June, 1897.]

The practice of dentistry and of veterinary medicine likewise require the license of the board of regents after due examination. (See public health law, 1893, chap. 661.)


University of the State of New York
LOCATION OF INSTITUTIONS
JANUARY 1, 1898
Interior heavy lines represent boundaries of county groups according to the decimal classification used in the state library.
■ = college
● = academy
▲ = high school
+ = public library
L = law school
T = theological school
S = special school
⊙ = City of over 50,000 inhabitants. Institutions are given in table at foot of map.
Lake Ontario
Lake Erie
NIAGARA
ORLEANS
GENESEE
MONROE
WAYNE
WYOMING
LIVINGSTON
ONTARIO
YATES
SENECA
CAYUGA
ONONDAGA
MADISON
OSWEGO
ONEIDA
LEWIS
JEFFERSON
ST. LAWRENCE
FRANKLIN
CLINTON
ESSEX
HAMILTON
WARREN
WASHINGTON
SARATOGA
FULTON
MONTGOMERY
SCHOHARIE
ALBANY
RENSSELAER
GREENE
COLUMBIA
MASS.
CHENANGO
CORTLAND
TOMPKINS
SCHUYLER
CHEMUNG
TIOGA
BROOME
DELAWARE
CHAUTAUQUA
CATTARAUGUS
ALLEGANY
STEUBEN
ULSTER
DUTCHESS
CONN.
SULLIVAN
ORANGE
PUTNAM
WESTCHESTER
ROCKLAND
NEW JERSEY
LONG ISLAND
NASSAU
SUFFOLK
ATLANTIC OCEAN
INSTITUTIONS IN CITIES OF OVER 50000 INHABITANTS.
COLLEGES
LAW
MEDICINE
PHARMACY
DENTISTRY
VETERINARY
THEOLOGY
PEDAGOGY
ENGINEERING
MUSIC
SPECIAL
ACADEMIES
HIGH SCHOOLS
LIBRARIES
TOTAL
51 16 17 7 16 7 9 712 838

PART II.

THE INSTITUTIONS COMPRISED IN THE UNIVERSITY.

CHAPTER 5.

UNIVERSITIES AND COLLEGES FOR MEN, INCLUDING THOSE ALSO ADMITTING WOMEN.

Columbia University, Seth Low, LL. D., President—Columbia College—Faculty of law—College of Physicians and Surgeons—Faculty of applied science—Faculty of political science—Faculty of philosophy—Faculty of pure science—Teachers' College—Barnard College.

1. COLUMBIA UNIVERSITY.

By FRANK R. HATHAWAY, A. M.

KING'S COLLEGE 1754–1784.

On the 31st day of October, 1754, King George II granted a charter to "King's College in the city of New York," "for the education and instruction of youth in the liberal arts and sciences." This charter was the outcome of years of effort on the part of those interested in the welfare of the colony, but in so short a sketch it is not necessary to go back further than the first measure, an act of the assembly passed in 1746, by which it was provided that moneys should be raised by public lottery "for the encouragement of learning." Under this and subsequent acts the sum of £3,433 18s. was raised, and in 1751 this fund was vested in a board of trustees, ten in number, of whom one was a Presbyterian, two belonged to the Dutch Reformed Chuch, and the remaining seven to the Church of England, some of them being vestrymen of Trinity Church.

The fact that so large a proportion of the trustees belonged to the Church of England led to fears among the colonists lest the college should become a church institution, and when the plan of obtaining a royal charter became known a very bitter opposition arose. It was led by Mr. William Livingston and represented the American as against the English sentiment. He began in March, 1753, to publish in the Independent Reflector "Remarks on our intended college," in which he claimed that it should be founded by an act of assembly, not by royal charter.

In the fall of this year, in the face of the opposition, Rev. Dr. Samuel Johnson, of Connecticut, was invited to be president of the new institution at a salary of £250, with Mr. Chauncey Whittlesey

as an assistant, at £200—not very great inducements, surely, but all that the college could afford at that time. Later on Dr. Johnson was enabled to increase his income, being appointed by the vestry of Trinity Church an "assistant minister" of that parish, with a salary of £150. Moving to New York in the spring, Dr. Johnson commenced his labors immediately, but he did not formally accept the position until after the granting of the charter in October.

At a meeting of the trustees on the 16th of May a draft of the proposed charter was read and formally opposed by Mr. Livingston, but in spite of his efforts the trustees proceeded with their application, and in expectation of success advertised their entrance examinations for the 17th of July. On that day, in the vestry room of the schoolhouse belonging to Trinity Church, the following eight men were examined for admission to the college: Samuel Verplank, Robert Bayard, Samuel Provost, Thomas Marston, Henry Cruger, and Joshua Bloomer.

Three months later the charter was granted, and appointed—

The most Reverend Father in God, Thomas, Lord Archbishop of Canterbury, and the Lord Archbishop of Canterbury for the time being; The Right Honorable Dunk, Earl of Halifax, first Lord Commissioner for Trade and Plantations for the time being; our now Lieutenant-Governor and Commander in Chief of our Province of New York, and the Governor or Commander in Chief of our said Province for the time being; the eldest Councilor of our said Province now and for the time being; the Judges of our Supreme Court of Judicature of our said Province now and for the time being; the Secretary of our said Province now and for the time being; the Attorney-General of our said Province now and for the time being; the Speaker of the General Assembly of our said Province now and for the time being; the Treasurer of our said Province now and for the time being; the Mayor of our said City of New York now and for the time being; the Rector of Trinity Church in our said City now and for the time being; the Senior Minister of the Reformed Protestant Dutch Church in our said City now and for the time being; the Minister of the ancient Lutheran Church in our said City now and for the time being; the Minister of the French Church in our said City now and for the time being; the Minister of the Presbyterian Congregation in our said City for the time being; the President of the said College appointed by these Presents, and the President of the said College for the time being; and Archibald Kennedy, Joseph Murray, Josiah Martin, Paul Richard, Henry Cruger, William Walton, John Watts, Henry Beekman, Philip Ver Plank, Frederick Philipse, Joseph Robinson, John Cruger, Oliver De Lancey, James Livingston, Esquires, Benjamin Nicoll, William Livingston, Joseph Read, Nathaniel Marston, Joseph Haynes, John Livingston, Abraham Lodge, David Clarkson, Leonard Lispenard, and James De Lancey the Younger, Gentlemen, to be the present Governors of the said College;

And made them "a Body politick and Corporate," capable of holding land, suing, and being sued.

At a meeting held on the 7th of May, 1755, the charter was formally presented by the lieutenant-governor, Mr. James De Lancey, and the legal oath was administered to the governors by Mr. Horsmanden, a judge of the supreme court. At their next meeting, held a week later, the board of governors of the college, being now organized and

authorized by law to hold property, Trinity Church carried out the original plan and presented them with a piece of property west of Broadway between Barclay and Murray streets, facing on Church street and extending to the North River, the same being a portion of the King's farm, which it was believed had been vested in the church as well for the encouragement of learning as of religion. This gift was on condition that—

the president of the said college for the time being sha'l forever hereafter be a member of and in communion with the Church of England.

This conditional clause greatly increased the opposition to the charter. Mr. Livingston looked upon the college as a sectarian school, and objected strenuously to using for the support of any church institution moneys collected by the State. This was the popular side of the cause, and in December, 1756, it became in a measure successful; for the moneys collected by public lottery were then divided between the college and the "mayor and commonality of the city of New York."[1]

An interesting episode in this controversy took place at the first meeting of the governors. The Rev. Mr. Ritzema, senior minister of the Reformed Protestant Dutch Church, in an address upon the subject expressed a wish that some plan could be "fallen upon" to controvert the charge of sectarianism. He suggested that a chair in divinity be founded in the college and be filled by a minister of the Reformed Protestant Dutch Church. The governors immediately acquiesced, and a committee was appointed to arrange for the altering of the charter, and at a subsequent meeting an addition to the charter was read providing for "a professor in divinity according to the Doctrine, Discipline, and Worship established by the Synod of Dort." This proved merely a sop to Cerberus, for the chair so created was never occupied.

On the 3d of June, 1755, the governors adopted a seal, of which the following is a description, copied literally from the minutes:

The device of the College Seal.—The College is represented by a Lady sitting in a Throne or Chair of State, with Severall Children at her Knees to represent the Pupils, with I Peter II., 1, 2, 7 v., under them to express the Temper with which they should apply Themselves to seek for True Wisdom. The words are, Wherefore laying aside all Malice and all Guile, and Hypocrises and Envies and Evil Speakings, as New-born Babes desire the Sincere Milk of the Word that ye may grow thereby, &c. One of them She takes by the hand with her left hand expressing her benevolent design of Conducting them to true Wisdom and Virtue. To which purpose She holds open to them a Book in her right hand in which is [in] Greek letters *ΛΌΓΙΑ ΖΩΝΤΑ*, the living or lively Oracles, which is the Epithet that St. Stephen gives to the Holy Scriptures—Acts. 7:38. Out of her Mouth over her left Shoulder goes a Label with these words in Hebrew Letters ORI-EL, God is my light; alluding to Ps. 27:1. expressing her Acknowledgment of God the Father of Lights, as the Fountain of all that Light, both Natural and Revealed with which She proposes to enlighten or instruct her Children or Pupils; whereof

[1] The division gave to each corporation the sum of £3,282.

the Sun rising under the Label is the Emblem or Hieroglyphic, alluding to that expression Mal. IV, 2., The Sun of Righteousness arising with healing in his Wings. Over her head is Jehovah in a Glory, the Beams coming triangularly to a Point near her head, with these words around her for her motto, In Lumine Tuo Videbimus Lumen—In thy light shall we see light Ps. 36:9. On the Edge around are engraved in Capitals, Sigillum Collegii Reg. Nov. Ebor. in America—The Seal of King's College at New York in America.

During the first two years of its existence the college was without a home, but after a lengthy discussion of the subject a plan was adopted and Sir Charles Hardy, then governor of the province, laid the first stone on the 23d of August, 1756. When the old college building was torn down, in 1857, this stone, which contains a suitable inscription, was carefully preserved and built into the wall of the present chapel. Another relic of the colonial days is a weather-beaten copper crown. This emblem of royalty used to surmount the cupola of the building in College place, and has lately been given a prominent position in the new library building. A traveler who visited New York in 1760 says:

The college, when finished, will be exceedingly handsome. It is to be built on three sides of a quadrangle, fronting Hudson's or North River, and will be the most beautifully situated of any college, I believe, in the world.[1]

When the second class was admitted to the college it became necessary for Dr. Johnson to have an assistant. His son, Mr. William Johnson, was accordingly appointed in the place of Mr. Whittlesey, who, on account of poor health, had never entered upon the duties of that position. After about a year Mr. William Johnson went abroad to take orders, and Mr. Leonard Cutting was appointed to fill his place. In November, 1756, the smallpox broke out in the city and Dr. Johnson left the college to the care of Mr. Cutting and took refuge in the country. The work of the three classes proved too much for Mr. Cutting, and the governors procured Mr. Treadwell and appointed him professor of mathematics and natural philosophy, and provided him with "an apparatus of instruments for teaching experimental philosophy in the college." Mr. Treadwell was expected also to teach Latin and Greek to the two younger classes. A committee was appointed from the governors to visit the College during the absence of Dr. Johnson, and even after his return the committee was continued for some years as a visiting committee to look after the general welfare of the College.

The president returned to the city in March, 1758, and at a meeting held May 9, Dr. Johnson, Mr. Barclay, Mr. Ritzema, Mr. Weygand, Mr. Carlo, Colonel Martin, Mr. Nicoll, and Mr. John Livingston were appointed a committee to arrange for a commencement. The first commencement of King's College was accordingly held on the 21st of

[1] Travels through the Middle Settlements in North America in the years 1759–1760, with observations upon the state of the Colonies. By Rev. Andrew Burnaby, A. M., Vicar of Greenwich. T. Payne, London, 1765, quarto edition, p. 61.

June, 1758, and the degree of A. B. was conferred on eight men, twelve more receiving the degree of A. M. The following year no commencement was held, two men, however, received the degree of A. B.

In the spring of 1760, the partially completed buildings having been occupied, a procession of the governors, officers, instructors, and students formed on the college green and marched from there to St. George's Chapel, where the third annual commencement was held. Writing at this time Dr. Burnaby said:

> At present the state of it [the college] is far from being flourishing or as good as might be wished. Its fund does not exceed £10,000 currency and there is a great scarcity of professors. A commencement was held, nevertheless, this summer (1760) and seven[1] gentlemen took degrees. There are in it at this time about twenty-four students. The president, Dr. Johnson, is a very worthy man, but rather too far advanced in life to have the direction of so young an institution. The late Dr. Bristow left to this college a fine library, of which they are in daily expectation.

Dr. Johnson was instructed to order these books delivered to a London agent and to request him to insure them and have them "shipt." He did so, but it was a long while before the books were received and even then there seems to have been a mistake by which some of them were lost.

The work of finding new instructors was a difficult one, and in February, 1760, a committee was appointed to write to the Archbishop of Canterbury requesting him to procure two competent men and authorizing him to offer £150 for one and £80 for the other, the salary to begin at the time of embarkation. At the opening of the next term the chair in mathematics and natural philosophy, left vacant by the death of Mr. Treadwell, was filled by the appointment of Mr. Robert Harpur, but it was some time longer before the trustees succeeded in finding the second instructor for whom they had been looking, not, in fact, until November, 1762, when the Rev. Myles Cooper was made a fellow of the college and professor of moral philosophy. His salary was fixed at £150, and for this he was expected, in addition to instructing his own classes, to assist the president, whose duties had been to give instruction in Greek, logic, metaphysics, and ethics.

On the 25th of March, 1761, it was—

> *Ordered*, That Mr. Edward Willett be appointed steward of King's College during pleasure, to provide such of the students as have an inclination to diet with him upon such terms as shall be agreed upon between them, and that he have the use of two rooms and a kitchen in the college, and such part of the garden as the President and he shall agree upon, he causing the students' rooms to be kept clean and the beds made. Also that the students breakfast, dine, and sup together in the college hall, but that they be allowed no meat at suppers.

At the fall meeting in 1764 a committee was appointed to level the college grounds, plant trees, and build a fence and porter's lodge, and we learn from a paper left by President Cooper that the lodge

[1] The college catalogue gives only six names.

gate was closed summer nights at 10 o'clock and winter nights at 9, and the names of all who came in after these hours were reported to the president.

On the 1st of March, 1763, Dr. Johnson resigned, and Mr. Cooper occupied his place until the 12th of April, when he was formally elected to the position of president at a salary of £270. In the fall President Cooper's salary was increased to £400, and at the same meeting letters were received from the agents who had been collecting money abroad, authorizing the college to draw £5,000. The first commencement under the administration of President Cooper took place May 17, 1763, when two students received the degree of A. B. and seven alumni of the college that of A. M.

ESTABLISHMENT OF A MEDICAL DEPARTMENT.

In August, 1767, the governors received letters from Drs. Samuel Clossey, Peter Middleton, John Jones, James Smith, Samuel Bard, and John V. B. Tennent suggesting the establishment of a medical department in the college and offering their services as lecturers during the winter. Their offer was accepted, and the appointments were made as follows: Dr. Clossey, lecturer in anatomy; Dr. Middleton, in physiology and pathology; Dr. Bard, in the theory and practice of "physick;" Dr. Jones, in the theory of "chirurgery," with a course of lectures on the human body; Dr. Smith, in chemistry; Dr. Tennent, in materia medica and midwifery. From this unpretentious beginning, as will hereafter be seen, grew one of the finest and best equipped medical schools in the world.

In 1773 Rev. John Vardill was appointed professor of natural law, and soon after of history and languages. He was the first alumnus of the College who received an appointment as instructor in the College. Under Dr. Cooper the College was prosperous, but he was a royalist and got himself into ill repute by writing political papers. Finally his house was entered by a mob and he was forced to flee for his life. Escaping from the grounds, he wandered along the shore of the river until near morning, when he took refuge in the house of his friend Mr. Stuyvesent, and soon after sailed for England. The students, led by Alexander Hamilton, showed that although the College was English in religion, it was not, as it had been called, "a hotbed of royalism." May 16, the Rev. Benjamin Moore, an alumnus of the College, was appointed president pro tem.

On the 6th of April, 1776, the Committee of Safety ordered the buildings to be gotten ready to receive troops, and accordingly the books and apparatus were stored, the rooms were converted into hospital wards, and for eight years the College had but a slumbering existence.

We are indebted to a paper, said to have been written by President

Cooper, for some valuable information concerning the College and its management. Speaking of the institution, he says:

Herein are taught by proper masters and professors, who are chosen by the governors and president, divinity, natural law, physic, logic, ethics, metaphysics, mathematics, natural philosophy, astronomy, geography, history, chronology, rhetoric, Hebrew, Greek, Latin, modern languages, the belles-lettres, and whatever else of literature may tend to accomplish the pupils as scholars and gentlemen.

To the college is also annexed a grammar school for the due preparation of those who propose to complete their education with the arts and sciences.

All students but those in medicine are obliged to lodge and diet in the college unless they are particularly exempted by the governors or president. . . .

Visitations by the governors are quarterly, at which times premiums of books, silver medals, etc., are adjudged to the most deserving.

FOUNDING OF COLUMBIA COLLEGE, 1784-1787.

UNDER THE REGENTS.

Very little is known of the history of the College during the years of the war; in fact, it had little history. The College Record remarks:

The turbulence and confusion which prevail in every part of the country effectually suppress every literary pursuit.

It would seem, however, that some instruction continued to be given under the auspices of King's College, though not within its walls, for we find in its matricula the names of William Walton and James De Lancey Walton, entered in the year 1777; and the governors appear to have met occasionally after this, for there exists a certified copy of minutes of a meeting on the 17th of May, 1781. These are the only indications, faint as they are, which have been discovered of the existence of the College during a period of eight years—from the spring of 1776 to that of 1784—except that it afterwards appears from the minutes of the trustees of Columbia College on the 28th of March, 1788, that Mr. Moore, the president ad interim, occupied during a part of this period a house furnished by Mr. Lispenard for the use of the officers and students of the College when the College edifice was converted into an hospital.[1]

With its president gone, its instructors scattered, its books and instruments stored or lost, the College had sunk to a very low ebb, and legislative aid had become a necessity. On the 25th of November, 1783, the British evacuated New York, and six months later, on the 1st of May, 1784, in response to a strong appeal from Governor George Clinton, the legislature passed "An act for granting certain privileges to the college heretofore called King's College for altering the name and charter thereof, and erecting an university within this State."[2] By this act the rights, privileges, and immunities of the College were vested in a body called the "Regents of the University of the State of New York," which was to consist of the governor, lieutenant-governor, president of the senate, speaker of the assembly, mayors of New York and Albany, the attorney-general and the secretary of State ex officio, and twenty-four gentlemen appointed by

[1] Moore's Historical Sketch, p. 64.

[2] Laws of the State of New York, seventh session, ch. 51.

name, among whom were Mr. Henry Brockholst Livingston, the son of the gentleman who, thirty years before, had so bitterly opposed the royal charter, and Mr. Robert Harpur, who had been connected with the royal institution as professor of mathematics. Further, the clergy of the respective religious denominations were empowered to meet and elect a regent to represent them in the University. To this body was given all powers and responsibilities respecting the college heretofore known as King's College. They were to hold the property, appoint the president and professors, and attend to the general management, but it was especially enacted that no religious test oath should be required and that "no professor shall be in anywise whatsoever accounted ineligible for or by reason of any religious tenet or tenets that he may or shall profess." The last clause of the act changed the name from King's to Columbia College.

The first act of this board of regents after organization was the appointment of several committees, one "to demand and receive from the late corporation of the college called King's College" whatever property it had held, and others charged with the repairs of the college edifice, the preparing of by-laws, the engaging of proper instructors, etc. One of the first instructors engaged was the Rev. John Peter Tetard, who was appointed professor of the French language. A committee of the regents, consisting of the chancellor, Governor George Clinton; the vice-chancellor, Hon. Pierre Van Cortlandt; the secretary, Mr. Robert Harpur; the mayor of New York, and the newly appointed Professor Tetard, was chosen to conduct all examinations, and the first man to appear before them was De Witt Clinton, who entered the junior class. From this time, so long as the College remained in the care of the regents, all examinations were conducted by such committees.

The regents appear to have been very zealous in their efforts to make the college the nucleus of a great university. With this view they applied themselves diligently to obtain subscriptions of money toward the maintenance of the college, and making large calculations probably on the success of these, they resolved December 14, 1784, to organize the four faculties of arts, divinity, medicine, and law, making the first to comprise seven professorships, the second to consist of such as might be established by the different religious societies within the State pursuant to the act instituting the university, the third to be composed of seven professors, and the last of three. Besides all which there were to be nine extra professors, a president, a secretary, and a librarian.

All this magnificent scheme was adopted when the entire income from the real and personal property of the college did not exceed the sum of £1,200.[1]

Naturally this elaborate plan was not carried out. No president was appointed, and of the four faculties proposed those in divinity

[1] Historical Sketch, p. 68.

and law were not created. The other two, however, were quite complete, the faculty of arts comprising professors in Greek and Latin, French, German, oriental languages, rhetoric and logic, natural philosophy and astronomy, natural history and chemistry, and a tutor in mathematics who was afterward made professor.

The candidate for admission under this faculty was required to be able "to render into English Cæsar's Commentaries on the Gallic War, the four orations of Cicero against Catiline, the first four books of Virgil's Æneid, and the Gospels from the Greek." He was also required "to explain the government and connection of the words and to turn English into grammatical Latin." The requirements in mathematics were simply the first four rules of arithmetic with the rule of three.[1]

The faculty of medicine was very well equipped with Drs. Bard, Kissam, McKnight, Romaine, and Crosby, teaching chemistry, medicine, anatomy and surgery, practrice and obstetrics.

Discipline was maintained by means of fines, a system which has been entirely abandoned in institutions of this kind.

Instead of one long summer vacation, our predecessors had their resting periods scattered through the year. There were two vacations of six weeks each, the first beginning immediately after commencement and the second after the examination in October.

THE NEW CHARTER.

The board of regents was composed of a large number of gentlemen from different parts of the State, and three years' experience under its government proved that the college could not be successful if its educational as well as financial administration were placed in so scattered a body. No one appreciated this fact better than the regents themselves, and a movement for reform, led by two of their number, Alexander Hamilton and Ezra L'Hommedieu, began in the winter of 1786–87. A committee was appointed to submit to the legislature a scheme for reorganization, and as a result there was passed on the 13th of April, 1787, "An act to institute an university within this State, and for other purposes herein mentioned."[2] By this act a charter was granted to Columbia College similar to the old royal charter, having only a change of name and such alterations as were made necessary by the change of the National Government. A number of gentlemen from the board of regents were chosen to form a board of trustees for the college, and Columbia became independent of the State university, subject only to visitation and general supervision. It was provided that the board of trustees should consist of 24 gentlemen; that it should be perpetuated by cooptation, and that "no persons should be trustees in virtue of any offices, characters, or descrip-

[1] Statutes, 1785.

[2] Laws of the State of New York, tenth session, chap. 82.

tions whatever," thus ridding the board of any political bias. The entire government, educational and financial, and the choice of all college officers was committed to this board.

The first meeting of the trustees of Columbia College was held on Tuesday, the 8th of May, 1787, and Mr. Brockholst Livingston was reappointed treasurer and Mr. Robert Harpur clerk. The by-laws which had been established by the regents were adopted in so far as they were not repugnant to the new constitution of the college.

The Early Presidencies, 1787–1849.

At their third meeting the trustees elected William Samuel Johnson, LL. D., the son of the first president of King's College, to be the first president of Columbia College. His assistants were, in the school of arts, Professors Cochran and Kemp, and in the school of medicine, Drs. Kissam, McKnight, and Crosby.

Under the regents no academic dress had been worn either by students or professors, but an early resolution of the trustees "recommended to the president and professors of the college to wear gowns."[1] This was seconded by a petition of the students, and the following resolution was adopted by the trustees:

Resolved, That for the present such of the students as choose to wear gowns be, and they are hereby, permitted to wear them.[2]

The college at this time was in a very trying situation. Of the 39 students, but 5 boarded in the college. The yearly income of the institution was only about £1,300, and legislative aid had become a necessity. In 1790 the report of the regents to the legislature was accompanied by a petition from the trustees of Columbia College for pecuniary assistance. These communications were submitted to a joint committee, and on the 4th of March, through Mr. Duane, they reported themselves as "unanimously of the opinion that the rents and profits of the land belonging to this State at Crown Point, Ticonderoga, and Fort George, on Lake George, and also the island near the city of New York, commonly called Governor's Island, together with the sum of £1,000, ought to be vested in the regents of the university, to enable them to supply the wants of the said college and the respective academies and to answer the ends of their institution."[3] The substance of this report was embodied in a bill which passed on the 31st of the same month.[4]

That this gift was appreciated is shown by the report of the regents for the following year:

The provision for the promotion of sound learning and true philosophy which was made by the legislature at their last session has been faithfully applied to

[1] Resolutions of the Trustees (published 1868), p. 155.

[2] Ibid, p. 9.

[3] Senate Journal, 1790, p. 24; Assembly Journal, p. 51.

[4] Laws of the State of New York, thirteenth session, chap. 38.

effect the important object for which their liberality was exerted. Although the sum granted is not altogether adequate to the exigencies of the seminaries under our inspection, it will in a great degree relieve their more immediate and pressing necessities, and so far answer the generous intentions of the legislature by procuring a mathematical and philosophical apparatus of which even Columbia College is almost entirely destitute. The money has been distributed in such a manner as we conceived would prove most subservient to the promotion of literature. One moiety of it has been given to Columbia College, and the remainder is to be divided among the four academies which were incorporated before our last report.[1]

The next report stated that purchases of apparatus had been made, but added that the library and apparatus were still very defective, and that the funds were not sufficient to enable the trustees to establish several very important professorships and to erect a convenient hall for public exhibitions and for other necessary purposes.[2]

On the 11th of April, 1792, the legislature gave further aid to the college by the passage of an act directing the treasurer to pay to the trustees the sum of £1,500 for the purpose of enlarging the library, the sum of £200 for a chemical apparatus, the sum of £1,200 for the purpose of building a wall to support the grounds of the college, made necessary by the lowering of the grade of the street, and, further, the sum of £5,000 for the purpose of erecting a hall and an additional wing to the college, pursuant to the original plan of the institution.[3] The same act provided for the payment of £750 per annum for five years, and by a subsequent act this was extended two years longer.[4]

Encouraged by this liberality, the trustees made many important changes during this year. Acting on the suggestion of the medical society of the State, and in concert with the regents of the university, they improved the organization of the medical school by the creation of the office of dean of the faculty. To this position they elected Dr. Samuel Bard, who had been professor of the theory and practice of medicine in King's College, and who had more recently held, first, the professorship of chemistry, and then that of natural philosophy and astronomy, during the administration of the regents. The new faculty consisted of Drs. Bailey, Post, Rodgers, Hamersley, Smith, Nicoll, and Kissam, whose assiduity and skill carried out the noble design of the founders, so that in 1793 the regents were able to report "that now a complete course of medical instruction is annually delivered in the college," and the school, which at present consists of 37 students, is daily increasing.

In the following year an important step was taken in the election of Mr. James Kent to a professorship in law. For five years he delivered courses of lectures intended to fit young men for practice at the bar. Twenty-five years later he resumed the work as Dr. Kent and has since become widely known as the great Chancellor Kent.

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[1] Senate Journal, 1791, p. 34; Assembly Journal, p. 51.
[2] Senate Journal, 1792, p. 29.
[3] Laws of the State of New York, fifteenth session, chap. 69.
[4] Ibid., nineteenth session, chap. 57.

The creation of the chair in law was followed by the institution of a professorship in humanity, and a regular course of lectures was planned "designed generally 'to explain and elucidate ancient learning and to facilitate the acquisition of liberal knowledge.'"[1]

The report for this year contains some interesting facts which throw a good deal of light on the condition of the college in those early times and also give an idea of the value of scholastic abilities in the last part of the eighteenth century.

The annual revenue arising from the estate belonging to Columbia College exclusive of some bonds which are not at present productive amounts to fifteen hundred and thirty-five pounds and is appropriated as follows—to the President £450, to the Professor of Natural Philosophy £350, to the Professor of the Greek and Latin Languages £300, to the Professor of Geography and Moral Philosophy £150, to the Secretary of the Board £50, to the Porter and Messenger £52, to the Treasurer £30 and there remain for repairs and contingent expenses £153. The President and Professors of the Faculty of Arts receive besides these fixed salaries from every student that attends them £2 per annum. The sum of £1500 granted by the Legislature for such additional professorships as might be established in the college has been appropriated as follows:—to the Professor of Chemistry and Agricu ture £200, to the Professor of Oriental Languages £100, to the Professor of the French Tongue £150, to the Professor of Law £200 and £50 are yet unappropriated. . . . .

None of the professors of the medical faculty have any stated salary. * * * What they receive from the students is not by any means an adequate compensation for their labor and services.[2]

In 1799 the trustees asked the legislature for a continuation of the £750 annuity which they had been receiving since 1792. This having been refused, it became necessary to reduce the number of professorships. Those in oriental languages, French, and law were discontinued. The duty of teaching rhetoric and belles-lettres, logic, and moral philosophy devolved upon the president; mathematics and natural philosophy were united under one professor, and with this Columbia entered upon one of the most trying periods of her existence. The number of students in 1800 was only 94, and on the 16th of July Dr. Johnson resigned the presidency. For thirteen years Dr. Johnson had administered the affairs of the college with skill and vigor. He was an educated Christian gentleman of rare ability and great literary attainments. Under the new National Government he was the first Senator from his native State, and held his office so long as Congress sat in New York, but on its removal to Philadelphia he resigned this honorable position that he might remain faithful to the college. The vacancy created by his resignation as president of Columbia was one not easily filled. The senior professor was empowered to preside at the ensuing commencement, and it was not until the 25th of May, 1801, that the trustees decided upon a successor.

[1] Assembly Journal, 1795, p. 85., Report of the Regents concerning Columbia College. This chair does not appear in the catalogue.

[2] Assembly journal, 1798, p. 221.

The Rev. Charles H. Wharton, S. T. D., of Philadelphia, was elected, and on the 3d of August he signified by letter his willingness to accept the office. On the 11th of December following he resigned after a term of less than five months.

In its extremity the college turned to the Right Rev. Benjamin Moore, who had served it under the royal régime and had temporarily filled the president's chair during the war. Dr. Moore was at this time bishop of the diocese and his duties were too numerous to admit of his giving any instruction in the college. He was therefore relieved of all professorial duties and charged simply with "the general superintendence of the institution." To the important chair thus left vacant, including moral philosophy, logic, rhetoric, and belles-lettres, the Rev. Dr. Bowden was elected with all but £100 of the salary formerly given to the president. The annual reports show that the number of students was continually increasing, but the trustees had a constant struggle to meet their expenses, and the buildings were falling into decay.

COLLEGE OF PHYSICIANS AND SURGEONS.

In spite of the favorable report of the regents, showing the medical department of the college to be "on a respectable footing, although the professors receive no pecuniary emolument from the State and the corporation of the college is unable to afford them any," the Medical Society of the County of New York sent a memorial to the legislature in 1807 requesting that they be incorporated as a college to "promote medical knowledge," and asked that they be placed under the direction, inspection, and patronage of the regents of the university. In response to this, within a month, the members of the society, numbering 139, were duly incorporated as "The College of Physicians and Surgeons in the City of New York." The first faculty of this school was headed by Dr. Nicholas Romayne and Dr. Samuel L. Mitchell, both formerly lecturers in Columbia. The prime movers in the new institution were thus men who had been intimately connected with the medical department of the college, and the necessity of starting a new school and separating it from Columbia does not appear.

In 1811 Dr. Bard, formerly dean of the medical department of Columbia, was elected to the presidency of the new college; and in 1813, through the influence of Dr. David Hosack, the medical lectures of Columbia College were transferred to the new institution.

Some years before this Dr. Hosack had established a botanic garden for the purpose of raising plants for the illustration of his lectures. Finding the garden too expensive for private maintenance he proposed to transfer its ownership to the State for public instruction in botany and materia medica. This proposal was finally agreed to, and "The Elgin Botanic Garden" was purchased by an act of the legislature and

assigned to the keeping of the regents of the university. They placed it under the care of the College of Physicians and Surgeons, "to be by them kept in a state of preservation and in a condition fit for all medical purposes, free of expense." This the new institution soon found itself unable to do, and the property proving a burden to them they returned it to the regents, who in turn granted it to the trustees of Columbia College upon condition that the college establishment should be removed to that location within twelve years.

QUESTION OF SITE.

A number of times during its history there had been propositions for the removal of the college to some less populous district, and this constant uncertainty had deterred the trustees from making any alterations in the buildings. In 1817 the regents requested that the trustees of the college consolidate the college property and funds with those of a new institution to which a charter had been granted under the name of Washington College, and for which Staten Island had been chosen as a site. This proposition excited a great deal of interest and led to a thorough investigation of the subject. It was referred to a committee of five of New York's most able men—Richard Harrison, Rufus King, Brockholst Livingston, Bishop Hobart, and William Johnson. After mature deliberation this committee made a report in which they stated that they deemed it the duty of the trustees not to accede to the proposal of the regents.

The discussion of this subject was of great benefit to the college, for as soon as they had answered the proposition in the negative they became satisfied with their situation and decided to repair the buildings and make the college what it should be where it was. A plan was accordingly agreed upon, and a committee appointed to carry it into effect.

Two wings, each fifty feet square and each containing two houses for professors, were added to the extremities of the original edifice, and of this older building, which underwent very extensive alterations, one-fourth being reserved as a dwelling house, the residue was so arranged as to furnish a chapel, a library, and all the required recitation rooms.

While these improvements were being made the trustees, presenting the facts to the legislature, stated that it would incur needless expense to move the college while the present buildings could be so easily made tenantable, and appealed to them to have the conditions on which they had received the Botanic Garden repealed. This request was granted by an act of February 19, 1819, and the trustees became unconditional owners of the tract of land now included between Fifth and Sixth avenues, extending from Forty-seventh to Fifty-first streets, an exceedingly valuable leasehold property, in comparison with which the sum of $10,000, granted at the same time, seems but a pittance.

This tract of land was the only considerable gift the college ever received from the legislature.[1]

CURRICULUM IN 1810.

On the 22d of June, 1809, upon the recommendation of a committee consisting of Mr. Rufus King and the Reverend Doctors Mason, Abeel, Hobart, and Miller a regulation was adopted raising the requirements for admission very much higher than ever before, and in the following February a new course of studies and system of discipline were arranged in accordance with the new statute.

To the requirements for admission, as stated above, were added several more Orations of Cicero, more of Virgil's Æneid, Dalzel's Collectanea Minora, the first two books of Xenophon's Cyropædia, and the first two books of Homer's Iliad. The requirements in mathematics were raised. The candidate was required to "be well versed in the first four rules of arithmetic, the rule of three, direct and inverse, and decimal and vulgar fractions."

The course of study was made to include, in the freshman year, Cicero's Letters to Atticus, Sallust entire, Horace's Satires, Dalzel's Collectanea Majora, Xenophon's Memorabilia, Kent's Lucian, double translation, Latin verse, Roman antiquities, Euclid's Elements, geography, English grammar and reading, English composition and declamation.

The sophomore class read Virgil's Georgics, Livy, the Odes and Epistles of Horace, Demosthenes, Homer, and Herodotus. They continued double translation and Latin composition in prose and verse, also Roman antiquities, and began Greek antiquities. In mathematics they took up plane trigonometry and its applications, and algebra. They studied geography, elements of rhetoric, English composition, and declamation in English and Latin.

In the junior class under the professor of languages were read Cicero on Oratory, Terence, Quintilian, Longinus, and Sophocles. The class also reviewed Horace, Greek and Latin antiquities, continued double translation, and took up Greek composition in prose and verse. English composition was continued with criticism and the student was required to declaim pieces of his own composition. History and chronology were added to geography, and in mathematics spherical trigonometry and conic sections were taken up. The important studies of this year were natural philosophy and the elements of ethics.

In the senior year to a continuation and review of the subjects formerly pursued were added astronomy, fluctions, analysis of intellectual powers, principles of reasoning, and law of nature and nations.

[1] This statement is not strictly accurate, as the college received in 1770 a grant of 24,000 acres of land "in the new county of Gloucester, in the Province of New York." This land, however, was included in the "New Hampshire Grants," and was lost to the college. The State made no compensation, unless the subsequent grant of the Botanic Garden can be considered such.

President Harris.

In May, 1811, Bishop Moore, having seen the college thus reorganized and its standard of education raised, resigned the presidency in order to make room for some one who would have it in his power to devote himself wholly to the college. On the 17th of June following the Rev. William Harris, S. T. D., rector of St. Mark's Church, was elected president, and the Rev. John M. Mason, S. T. D., was chosen to fill the newly created office of provost. This office, which was in fact a sort of vice-presidency coupled with the duty of instructing the seniors in the classics, only existed a few years. When Dr. Mason resigned, in 1816, on account of ill-health, the trustees determined that the powers and duties formerly connected with it should devolve upon the president and the classical professor.

During the administration of President Harris the college met with two serious losses in the death of Drs. Kemp and Bowden. Dr. Kemp had for twenty-eight years been a faithful worker in the mathematical department. Having begun as a tutor, he soon rose to the professorship, and eventually had the instruction in natural history added to his cares. At his death Dr. Kemp's books were purchased by the college, and made a valuable addition to the library. Dr. Bowden, who had been appointed at the accession of President Moore, had for sixteen years ably filled the chair in moral philosophy, logic, rhetoric, and belles-lettres. To the vacancies caused by these two deaths were elected, respectively, Mr. Robert Adrian and the Rev. John McVicar.

In February, 1820, Dr. Wilson, after a long and faithful service of the college in the professorship of the Greek and Latin languages, found himself obliged by increasing infirmities to resign his office, and the trustees in consideration of his "faithful and eminently useful services during eight and twenty years" granted him a liberal annuity for life. Mr. Nathaniel F. Moore, who had three years before been appointed adjunct professor, was elected to the chair, and Mr. Charles Anthon was appointed in his place as assistant. A further change in the staff of instruction was made by a division of the professorship of mathematics and natural philosophy into a professorship of mathematics and astronomy and a professorship of natural and experimental philosophy and chemistry. Of these the former was left to the charge of Dr. Adrian, who held it until 1825, when Henry J. Anderson, M. D., was elected upon the recommendation of the retiring professor. The latter was filled by the election of Mr. James Renwick, an alumnus of Columbia, and the college now for the first time saw most of her offices filled by her own alumni, Professors McVicar, Moore, Anthon, and Renwick having all been reared within her walls.

In 1821 the requirements for admission were again raised a little, the most important addition being algebra, including simple equations. The value of instruction depends more on the professor than

on the books used or the subjects studied, and with the divided chair the department of mathematics and natural philosophy offered a very comprehensive course. The influence of the man was shown also in Dr. McVicar's department, for in spite of the multifarious duties imposed upon him he added intellectual philosophy and political economy to the senior course, doing the extra work for the love of the subjects and without additional recompense. He was in fact one of the first men in America to give instruction in the subject of political economy.

Two years after this extension of the curriculum the Hon. James Kent was reappointed to the professorship in law, which he had resigned a quarter of a century before after having held it five years. The present appointment of this accomplished jurist gave rise to a course of lectures at the college which proved the germ of his learned Commentaries, and was consequently attended with results which, while they reflect honor on the college, are of inestimable value to the science of jurisprudence and to the whole legal profession.

In the fall of 1829 President Harris died, after a term of office extending over eighteen years during which he had witnessed many important changes both in the curriculum and in the personnel. A successor to Dr. Harris was found in the person of Hon. William Alexander Duer, LL. D., judge of the supreme court, who was called to the presidency of the college during the following winter. President Duer was born in Rhinebeck, N. Y., on the 8th of September, 1780. He was the son of William Duer, of Devonshire, England, and grandson of William Alexander, a claimant of the Scottish earldom of Stirling. In 1814 he was elected to the New York State assembly, and while a member of that body served as chairman of the committee on colleges and academies. His service on this committee no doubt greatly increased his fitness for the position to which Columbia called him.

LIBERALIZATION OF THE COURSE.

Owing to the agitation of a plan for the establishment of a rival institution, the trustees made an effort to increase the usefulness of the college. They tried to render the benefits of education more generally accessible to the community by making extensive additions and modifications in the system of instruction. The curriculum in existence at the time was kept entire and was called the "full course," and in addition a "scientific and literary course" was established for the benefit of special students. The statutes adopted by the trustees in May, 1836, introduced several provisions by which both these courses were further enlarged, and the "literary and scientific course" in particular defined and materially extended with the view of rendering it a complete system of instruction for young men designed for civil or military engineers, architects, superintendents of manufactories of all kinds, or for mercantile or nautical pursuits.

To carry out these plans the trustees appropriated $10,000 for the purchase of the requisite books and apparatus.

The requirements for admission were that the student should have a grammatical knowledge of the French language and "the mathematical and geographical knowedge required for admission into the freshman class" of the "full course." Besides the subjects formerly taught, instruction was now offered in the "full course" in surveying, leveling and navigation, elementary chemistry, heat, electricity, galvanism, magnetism, optics, practical astronomy, nautical astronomy, mineralogy, geology, calculus, mechanics, physical astronomy, principles of civil and military architecture, and civil engineering. Lectures were also given on constitutional jurisprudence and outlines of international law, and Dr. McVicar offered a course in the evidences of natural and revealed religion. There were also professorships in French, German, Italian, Spanish, and Hebrew. In the "literary and scientific course" practical work was offered in chemistry, examination and assay of earthy minerals, ores, and metals, the elements of perspective, the use of water colors, topographical drawing, drawing in civil architecture, of machines and instruments used in the mechanic arts, of the structures used in inland navigation, of the carriages and engines employed on railroads, and in naval architecture. Chapter XIV of the statutes provided for a course of public lectures open to all persons who might choose to attend, the fees of admission to be fixed by the respective lecturers. At the same time a number of free scholarships were established and their patronage distributed among the important corporations, institutions, and religious denominations in the city, thus removing any foundations for the accusation of sectarianism which had so often been thrust upon the institution.

In May, 1842, President Duer, having long suffered from a painful illness, found himself obliged to offer his resignation. The trustees regretfully released him from his duties and he retired to private life at his country seat in Morristown, N. J. The lectures on constitutional jurisprudence of the United States which he delivered during his administration were afterwards published and gained a considerable reputation in their day.

During the summer the vacancy was filled by the election of Nathaniel F. Moore, LL. D. A graduate of Columbia in 1802, Dr. Moore had already served as professor of Greek and Latin, and later in the capacity of librarian, and was well acquainted with the needs and possibilities of the college.

The scientific and literary course, which after a trial of thirteen years had proved unsuccessful, was abolished by the new statutes now drawn up, but the "full course" was further extended, and in fact included most of the subjects offered under the old régime. One important change in these statutes was the placing of the German language in the regular undergraduate course.

By the generosity of Frederick Gebhard, esq., a chair was endowed under the title of "The Gebhard Professorship of the German Language and Literature."

In December, 1844, Mr. J. W. S. Hows was appointed professor of elocution. Upon his retirement in 1857 instruction in this art ceased.

In 1847 Chancellor Kent died. This was a severe loss not only to the college, but to the legal profession. Mr. William Betts, A. M., an alumnus and a trustee of the college, was elected in his stead, and in the following winter delivered a course of lectures on international law. The law lectures, however, seem to have been intermittent; they led to no degree, and for a number of years prior to 1858 there was no systematic instruction in law given in any public institution in New York City.

Administration of President King, 1849–1864.

In July, 1849, Dr. Moore resigned the presidency. On the 7th of November of the same year Charles King, esq., was elected his successor. Dr. King was the second son of the Hon. Rufus King, who had for eighteen years served the college as a member of the board of trustees. He was educated at Harrow, England, and at Paris. In 1813 he had been elected a member of the legislature of New York, and was engaged in the publication of a conservative newspaper, the New York American. From 1827 to 1845 he was the sole editor, but in that year he left the American to become associate editor of the Courier and Enquirer, which position he held until he was chosen to the presidency of the college, when he "gave himself heartily to the duties of his new office, advancing the interests of the college in every way by his scholarship, energy, and wise management."

In 1854 an order of emeritus professors was instituted for the purpose of appropriately acknowledging the services of those professors who had devoted themselves to the college for twenty years or more, and Dr. Renwick was made the first emeritus professor. "These gentlemen were to be without salaries or stated duties, but were to have certain privileges and honors, the principal of which were these: Each of them was to have the right of nominating to one free scholarship to be called by his name, of delivering an annual lecture in the college, and of sitting with the faculty on public occasions. His portrait also was to be painted at the expense of the college and hung in the library or in some proper room in the college buildings."

The Removal of the College.

The rapid growth of the city and the falling in of the lease of the Botanic Garden directed the attention of the trustees, early in 1850, to the consideration of the disposition of that portion of their property. It had for many years brought in but a trifling revenue, wholly inadequate to meet even the expenses in which it had involved the

college, and now it seemed about to make still more formidable demands upon her resources for taxes, assessments, and the cost of regulating the lots. The whole subject of the disposition of this property was one of extreme delicacy and difficulty, and occupied the attention of the trustees for nearly two years, when it was finally leased.

The college edifice was again becoming inadequate to the needs of the institution; a remodeling of the course had become necessary, and the best plans could not be carried out in the buildings as they were. They consisted of "dwelling houses for the president and three professors; of a building occupied as the grammar school of the college, and of the chapel, library, and recitation rooms, the whole constituting the range of buildings in Park place between Church street and College place. Their value may be estimated according to their present use at $50,000, but the ground on which they stand may be estimated at $500,000."[1]

The noise of commerce was fast drawing in around the college, and attached as many were to the old situation, it became evident that they must move away from the halls which through years of labor they had learned to love. The new site was under consideration for a number of years, and it was not until 1857 that it was finally chosen and the college moved to the block between Forty-ninth and Fiftieth streets and Madison and Fourth avenues. The buildings on this block were those formerly occupied by the Asylum for the Deaf and Dumb and were chosen partially because they could be occupied immediately at comparatively small expense.[2]

The cost of this property was $75,366.10,[2] and in altering and refitting the buildings and regulating, grading, and fencing the grounds the college spent $38,969.91 more. Meanwhile they sold the old college property for $596,650, "and the college green is transformed into streets lined with costly warehouses."

CURRICULUM IN 1857.

The college had now succeeded in finding new and comfortable quarters, and it remained to carry out the rest of the plan and rearrange and liberalize the course. The committee which had been appointed in 1856 had the matter under consideration for several months. They personally investigated the methods used by each professor and the results obtained, and studied the curricula in many other colleges. The report of the committee embodied a new scheme providing for a university course of study as follows:

Lectures shall be delivered in the college, which shall be conducted in three distinct schools. They shall be open to any person, under such regulations as the Trustees may from time to time prescribe.

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[1] Report of the Regents, 1857.

[2] Regents' Report, 1858, contains a description of these buildings.

1. A school is established, called the School of Letters. in which shall be pursued the following studies:

Moral and mental philosophy, including an analysis of the moral and intellectual powers, æsthetics, or the principles of taste and art; the history of philosophy; appropriate literature of the Greeks and Romans; oriental and modern languages, as far as possible; comparative philology and ethnology.

2. A school is established, called the School of Science, in which shall be pursued the following studies

Mechanics and physics, astronomy, chemistry and mineralogy, geology and palæontology, engineering, mining and metallurgy, art of design; history of science, natural history, physical geography.

3. A school is established called the School of Jurisprudence, in which shall be pursued the following studies:

History, political economy, political philosophy, the principles of national and international law civil and common law, the writings of the Greeks and Romans, and of the modern civilians and jurists appropriate to the last three subjects.

The conjunction of the above three schools shall form the university course.

Any person who may enter either of the said schools may receive the degree of master of arts after having pursued for a space of time not less than two years, to the satisfaction of the Trustees and Faculty, such of the studies thereof and under such regulations as the Trustees may from time to time prescribe.

There shall be fellowships, with or without stipends, to be filled by the Board of Trustees, upon such examination and upon such rules and regulations as may hereafter be prescribed.[1]

These extensive plans serve to show that the aim of the college has always been toward the position of a liberal university, and, although they were not carried out in full, important changes in this direction were made. In the faculty of arts the board of instruction was augmented by the appointment of several new professors. Up to this time, under the comprehensive title of professor of moral philosophy, Dr. McVicar had given instruction in the evidences of natural and revealed religion, ethics, intellectual philosophy, logic, rhetoric and belles-lettres, and historical and political science. This work was now divided between three professors. The chair in evidences of natural and revealed religion was retained by Dr. McVicar. A chair in moral and intellectual philosophy and literature was filled by the election of Charles Murray Nairne, M. A., L. H. D. Dr. Nairne was born at Perth, Scotland, on the 15th of April, 1808, graduated at St. Andrew's University in 1830, and two years later received the degree of M. A. from the University of Edinburgh. He then became assistant to the celebrated Dr. Chalmers, of Glasgow, a position which he held for a number of years. In 1847 he came to America, where his ability as director of a classical school attracted the attention of the trustees and led to his election. Subsequent events have proved that this choice was a wise one.

No less important was the election of Francis Lieber, LL. D., to the third chair, that of history and political science. He was called from a similar chair in the University of South Carolina, where he had

[1] Statutes.

gained great distinction as a publicist. Born in Berlin on the 18th of March, 1800, he had early joined the Prussian army and fought as a volunteer at Ligny and Waterloo, receiving a severe wound in the assault on Namur, which crippled him for life. Although arrested and imprisoned several times on suspicion of revolutionary sentiments, he never gave up his studies, and finally in 1820 took his doctor's degree at Jena. He then attempted to continue his studies at Halle, but was so persecuted that he found it necessary to leave the country. He spent a year at Rome in the family of Niebuhr (then Prussian ambassador) as tutor to his son Marcus. Returning to Berlin on the assurance of the King that he should not be molested, he was again thrown into prison, and only escaped through the pressing solicitations of Niebuhr. Leaving his native land in 1825, he came to this country, and in 1835 was called to a professorship in the University of South Carolina. It is here that the great works by which he is known were written—his Legal and Political Hermeneutics, his Political Ethics, and his Civil Liberty and Self Government.

These works represent the first real transmission of German political philosophy to the New World, through the clarifying influence of English history and American life. His was the first great original production of political science in America.[1]

By the call of Dr. Lieber to Columbia, history and politics were recognized as coordinate sciences, a combination which was the historical corner stone of the school of political science since founded by Prof. John W. Burgess.

Rather less prominent, but by no means less important, were the changes in the department of natural sciences. Professor McCulloh confined his work to the physical sciences, and to the chair in chemistry was elected Charles A. Joy, Ph. D. Professor Hackley took the chair in astronomy, and Charles Davies, LL. D., was made professor of mathematics, and to him was assigned, as an assistant, William G. Peck, A. M., with the title of adjunct professor.

In the classical department no new instructors were added, but a more logical division was made, Professor Anthon devoting himself to Greek, while Dr. Drisler became professor of Latin.

The university course was arranged practically as to-day, so that at the end of the junior year the student could take his choice between the lectures offered by the school of letters, the school of jurisprudence, and the school of science; and a post-graduate department was established corresponding to the present faculty of philosophy. From the regents' report we learn that during the year 1858 lectures were

[1] Study of History in American Colleges, by Dr. H. B. Adams. Circular of Information No. 2, Bureau of Education, 1887, p. 69. For interesting sketches of Dr. Lieber see this work and the History of Higher Education in South Carolina, by Dr. Colyer Meriwether, Circular of Information No. 3, Bureau of Education, 1888.

delivered in the university as follows: In the school of letters, by Professor Lieber, on the history of commerce and political science; by Professor Nairne, on ethics and æsthetics; by the Hon. George P. Marsh, on the English language; by Professor Guyot, on comparative physical geography in its relations to history and modern civilization. In the school of jurisprudence, by Professor Dwight, on municipal law and kindred subjects. In the school of science, by Professor McCulloh, on the mechanics of ethereal matter and the present state of knowledge in relation to heat, light, and electricity; by Professor Joy, on chemistry, with practical instruction in the laboratory; by Professor Peck, on civil engineering, including surveying and the use of instruments, general principles of construction, and graphics; by Professor Davies, on the higher mathematics and the nature and history of mathematical science; by Professor Hackley, on physical astronomy, with the practical use of instruments; by Professor Torrey, on botany.

In speaking of the fate of these new courses, which were abandoned after the first year, Professor Van Amringe says:

> The time seemed not to be ripe for the proper support by the public of the scheme, and it was relinquished after one year's trial. The college, indeed, by no means abandoned its cherished plan of giving more than ordinary academic training; but professional and scientific schools superseded that more liberal and extended course of teaching by which it had been hoped to inspire young men with an ardent and honorable love of learning and to qualify them for those higher and more arduous efforts of self-instruction which the college has ever regarded as the true aim and purpose of academic training.[1]

FOUNDING OF THE LAW SCHOOL.

From the remains of this experiment sprang the professional schools for which Columbia is to-day justly renowned. First among these was the school of law, under the able leadership of Theodore W. Dwight, A. M., who was appointed professor of municipal law on the 17th of May, 1858. Six years later he was placed at the head of the department, with the title of warden of the law school. This position he held until 1891, and for his long and faithful service he justly received the respect of all who could see and appreciate what he had done.[2]

> Professor Dwight, who has a reputation throughout the whole Union as the greatest living American teacher of law, has in substance founded and keeps alive simply by his own capacity as a teacher one of the best schools of law, in which one generation of pupils after another learns those elements of English law which, according to a certain number of good people, can not be taught from a professor's chair.

This is what Prof. A. V. Dicey, of Oxford, said of Professor Dwight, and Prof. James Bryce in speaking of his course said:

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[1] Historical Sketch of Columbia College by J. H. Van Amringe.

[2] Professor Dwight retired from the active duties of this chair in 1891 upon the reorganization of the law school. His death occurred a few years later.

Better law teaching than Mr. Dwight's it is hardly possible to imagine. It would be worth an English student's while to cross the Atlantic to attend his course.

Lectures were delivered by Professor Dwight upon constitutional law and upon the history of the Roman law as supplementary to the general course of instruction upon municipal law. Instruction in constitutional law was given by Professor Lieber and in moral philosophy by Professor Nairne. John Ordronaux, M. D., LL. B., was made professor of medical jurisprudence, and courses of lectures were delivered by several distinguished legal gentlemen of New York, who liberally gave their services without remuneration. During the first year of its existence the exercises of the school were held in the rooms of the Historical Society on Eleventh street, but at the commencement of its second year it was moved to Lafayette place, directly opposite the Astor Library. Twenty to thirty lectures were delivered by Professor Lieber "on the state, embracing a view of the origin, development, objects, and history of political society; on the history of political literature; on political ethics, and on punishment, including its history, statistics, and a view of the penal theories, systems, and codes of modern times."

ADOPTION OF THE COLLEGE OF PHYSICIANS AND SURGEONS.

On the 4th of June, 1860, the College of Physicians and Surgeons was by a resolution of the trustees adopted as the medical department of Columbia College. The College of Physicians and Surgeons had been incorporated by the legislature in 1807 and placed under the direct control of the regents of the University of the State of New York, which body, as has been seen, was originally intended to include all the higher educational establishments in the State. The medical department of Columbia College was merged into the College of Physicians and Surgeons in November, 1813, and as late as 1835 the university was the only recognized authority in the State for conferring medical degrees. Many medical schools existed, but everything connected with the courses of instruction, the examination of candidates, the selection of professors or lecturers or of new members of the boards of trustees, with other matters of incidental importance, required the ratification of the regents. After this time medical colleges began to be incorporated directly by the legislature and empowered to grant diplomas under the authority of their own trustees. The regents were, therefore, less solicitous for retaining a control which had so largely diminished in importance; and, on the other hand, the college no longer derived from its connection with the university the same prestige as before. Accordingly, the memorial of the trustees sent to the regents in 1859 was answered by an act of the legislature, passed March 24, 1860, amending the charter so as to give the college a system of self-government and the power to confer degrees. It was immediately after this that the union with

Columbia was effected, and after a separation of nearly half a century Columbia's medical department was returned to her.[1]

Administration of President Barnard.

At the stated meeting of the trustees in March, 1864, President Charles King, LL. D., tendered to the board his resignation to take effect at the next commencement, stating as his reason "advancing age and the necessity of repose." In accepting the resignation the following resolutions were passed by the trustees:

> Whereas the presidential term of Doctor King has been distinguished by the removal of Columbia College to its present superior site, by much development and expansion of its educational system . . . and a consequent augmentation of its importance and influence; and
>
> Whereas the bearing of the retiring president in his official relations with this board has been marked by courtesy and kindness, by frank, generous, elevated, and genial spirit, which engaged personal regard while it contributed to the pleasantness of our intercourse: Therefore,
>
> *Resolved*, That the trustees . . . unite in tendering him a unanimous expression of their respect and warm personal regard and of their grateful sense of the earnestness with which he has labored to promote the best interests of the institution under his charge.

On the 18th day of May, 1864, the Rev. Frederick Augustus Porter Barnard, S. T. D., LL. D., some time chancellor of the University of Mississippi, was elected to the presidency. In his letter Dr. Barnard said:

> I accept the position with a deep sense of the honor done me . . . and with the hope that by an earnest devotion to the important duties which it involves I may be so happy as in some degree to promote the interests of the institution and through it of the cause of education in the country.

Dr. Barnard was graduated at Yale College in the class of 1828, and was a tutor in that college in the year 1830–31. He was elected a professor in the University of Alabama in 1837, where he remained seventeen years filling successively the chairs of mathematics and natural philosophy and of chemistry and natural history. In 1854 he was chosen professor of mathematics and natural philosophy in the University of Mississippi, of which institution he became the president in 1856 and chancellor in 1861.

At his inauguration President Barnard found the college provided with 10 professors, 1 adjunct professor and 1 tutor in the faculty of arts, 8 professors and 3 assistants in the medical school, 2 professors in the school of law, and 2 in the new faculty which had just been formed under the name of the school of mines. The total number of students in all the departments was 625. The library proper consisted of less than 15,000 volumes, while the law library contained only 3,500. There were no elective courses, the scheme of 1857 having been

[1] For an account of the medical school see History of the College of Physicians and Surgeons, by President John C. Dalton, M. D. New York, 1888.

abolished after a few years' trial. German was the only modern language taught and this was entirely voluntary. To appreciate the value of President Barnard's work it is only necessary to compare the state of the college at his inauguration with the condition in which he left it when death overtook him in 1889.

At the very beginning of his administration the president met discouragement. The Rev. Dr. McVicar, who had so long been one of the main supports of the college, expressed his desire to withdraw from active service. Such a request from one who had been so faithful could not be refused, and the honor of an emeritus professorship was conferred upon the retiring professor.

Dr. McVicar was born in New York City on the 10th of August, 1787. He was the son of a leading merchant of that city and was of Scotch descent. He was graduated by Columbia in the class of 1804. Educated as a theologian he took orders in 1811 and for a time was settled over a parish in Hyde Park. At the age of 30 he gladly accepted a professorship under his alma mater and seized the opportunity to follow the inclination of his youth. His surroundings and acquaintances had been such that he could not escape the great politico-economic problems of his day. It was not strange therefore that he increased his own labors for the sake of giving instruction in his favorite subject. His devotion to the political sciences, however, did not detract from his ability as a logician, theologian, and philosopher, and the number and versatility of his works give evidence of untiring assiduity and a fertile mind.

The retirement of Dr. McVicar was not the only trial which the new president had to encounter. From the beginning the trustees had had a constant struggle, and the finances of the college were now in a very discouraging condition. The endowment was small in comparison with the amount of work necessitated by circumstances, and while the funds were scarcely sufficient to carry on the courses already laid out, it had become evident that there was public demand for a new professional school.

FOUNDING OF THE SCHOOL OF MINES.

Early in the year 1863 Mr. Thomas Egleston, a graduate of the Ecole des Mines of Paris, foreseeing the prominence which the United States was about to assume as a mineral-producing country, prepared a plan for the establishment of a school of mines and metallurgy in connection with the college. Realizing that Columbia was more advantageously situated than any other college in the country for such a school, the trustees very soon adopted this plan, and arrangements were made for the establishment of the school of mines. Mr. Egleston was made professor of mineralogy and metallurgy, and shortly afterwards Brig. Gen. Francis L. Vinton, also a graduate of the Ecole des Mines, was made professor of mining engineering. A few months later Dr. Charles F. Chandler, of Union College, was made professor of

analytical and applied chemistry, and on the 15th of November, 1864, the school of mines was formally opened in the basement of the old college building on Forty-ninth street. Arrangements were made by which Professors Joy, Peck, Van Amringe, and Rood of the college faculty were to give instruction in the school. The prospectus said:

The object of this school is to furnish to the student the means of acquiring a thorough scientific and practical knowledge of those branches of science which relate to mining and the working up of the mineral resources of this country and to supply to those engaged in mining and metallurgical operations persons competent to take charge of new or old works and conduct them on thoroughly scientific principles.

Instruction is given in the following subjects: Inorganic chemistry, organic chemistry, analytical chemistry, assaying, mineralogy, geology, botany, paleontology, mathematics, mechanics, metallurgy, machines, mining, physics, machine drawing, and descriptive geometry.

This was the first school of its kind in America, and its success was immediate and great. Twenty-five students entered it on the opening day, and the numbers reached forty-eight during the session. The first year, however, was one of great expense, and but for the personal efforts of President Barnard it would have become bankrupt during its first term. Encouraged by its evident popularity and usefulness and by the enthusiasm of the new president the trustees enlarged the accommodations of the school by appropriating $30,000 for a building with laboratories and drawing-rooms to accommodate 72 students. Eighty-nine, however, were admitted, and the rooms proved to be inadequate. At the close of the second year the success of the school being assured, the trustees determined to continue it in spite of their financial weakness. Accordingly, although it was necessary to go into debt to do so, $70,000 were voted for the construction of a new building and the purchase of a complete equipment. From this time the school continued to grow in numbers and in usefulness. In 1866 a chair in geology and paleontology was created and filled by the appointment of Dr. John S. Newberry, LL. D.

John Strong Newberry was born at Windsor, Conn., on the 22d of December, 1822. He was graduated at Western Reserve College and at Cleveland Medical College, and after studying abroad two years practiced medicine in Cleveland until May, 1855, when he was appointed assistant surgeon and geologist to the exploration party under Lieut. Robert S. Williamson. This party was sent to examine the country between San Francisco and the Columbia River. Later he accompanied Lieut. Joseph C. Ives in the exploration and navigation of the Colorado River. His observations formed the most interesting material that was gathered by the expedition, and fully half of the report was written by him. In 1859 he explored parts of southern Colorado, Utah, northern Arizona, and New Mexico. He was elected a member of the United States Commission, although still on duty in the War Department, and his medical knowledge and experience in the Army made him an important member of it.

After the war he was appointed to the professorship in the college. His abilities have since led to his appointment to many honorable offices. In 1869 he was made State geologist of Ohio, and the results of his work are published in nine volumes. He has since been associated with the work of the New Jersey Geological Survey, and reported on the fossil fishes and plants of the Trias and on the flora of the Amboy clays. In 1884 he was appointed paleontologist of the United States Geological Survey, and has prepared a monograph on the Paleozoic fishes of North America and on the fossil plants of the Cretaceous and Tertiary rocks of the far West. In January, 1888, the Geological Society of London conferred on him its Murchison medal. In 1863 he was named by Congress one of the corporate members of the National Academy of Sciences. He has been president of the American Association for the Advancement of Science, the New York Academy of Sciences, and the Torrey Botanical Club. Besides the volumes that have been mentioned Dr. Newberry's separate papers contributed to various sources include upward of two hundred titles, chiefly in the department of geology and paleontology, but also in zoology and botany.

Dr. Newberry brought with him to the college his magnificent mineralogical collection. This was augmented by a valuable donation of minerals made by George T. Strong, and soon after by the gift from the Hon. Gouverneur Kemble of a larger similar collection.

During the year 1867–68 the curriculum was enlarged so as to include four parallel courses of instruction: I. Mining engineering; II. Metallurgy; III. Geology and natural history; IV. Analytical and applied chemistry. The requirements for admission were somewhat increased and a preparatory year added to enable those who were not fully qualified to prepare for the entrance examination. This preparatory year has since become the first year of the course, which now covers four years, while the school has become far more than its name implies, being virtually a university of applied sciences "more scientific than Freiburg, more practical than Paris."[1] Civil engineering was added in 1870, being taught at first by the professor of mining engineering, but in 1872 it was separated from that chair and made the fifth parallel course.

In 1874 a still larger building was erected, at a cost of $150,000, and fitted up with every convenience for this school. This was the first of the group of buildings planned by Mr. C. C. Haight, a graduate of the college, who has made this block a prominent architectural feature of the city.

The attention that Dr. Barnard was called upon to give to this school did not deter him from equal activity in the other departments.

[1] John A. Church, E. M., Ph. D., in North American Review, January, 1871.

DEPARTMENT OF MATHEMATICS.

On the death of Dr. Hackley, in 1861, William G. Peck, professor of pure mathematics, had been transferred to the chair of mathematics and astronomy, and two years later Mr. J. Howard Van Amringe was promoted from the tutorship to the adjunct professorship.

In 1865 Dr. Davies, the professor of higher mathematics, was retired as emeritus professor. Dr. Davies had gained great eminence in his profession. He was a graduate of West Point, where he was afterwards professor of mathematics. This position he was forced to resign on account of illness, but later held similar chairs in Trinity College, Hartford, and the University of New York. For five years he served as treasurer of the United States Military Academy. The professorship at Columbia, to which he was called in 1857, was the last that he held. On his resignation he retired to private life at Fishkill Landing, where he died on the 17th of September, 1876. His works, which are distinguished by plainness and close logical arrangement, comprise an entire series of mathematical text-books, extending from a primary arithmetic to the higher mathematics, and including editions of Legendre's Geometry and Bourdon's Algebra. Among his more advanced works are Descriptive Geometry; Surveying and Navigation; Shades, Shadows, and Perspective; Differential and Integral Calculus; Logic and Utility of Mathematics, and a Mathematical Dictionary, the latter written in conjunction with his son-in-law, Prof. William G. Peck.

On the retirement of Dr. Davies the whole department was reorganized under the leadership of Dr. Peck, who, graduating from the United States Military Academy at the head of his class, was assigned to the Corps of Topographical Engineers and served in the third expedition of John C. Fremont, in 1845. He was also with the army of the West, under Gen. Stephen W. Kearny, during the Mexican war. He was assistant professor of natural philosophy at West Point in 1846 and professor of mathematics from 1847 to 1855, when he resigned from the Army. He then became professor of physics and civil engineering in the University of Michigan, where he remained until 1857, when he came to Columbia.

At the outbreak of the civil war Mr. McCulloh was "expelled for having abandoned his post and joined the rebels," thus leaving vacant the chair in mechanics and physics. Dr. Peck took upon himself the duty of giving instruction in mechanics, and an able professor of physics was found in the person of Ogden N. Rood. Professor Rood was a graduate of Princeton, in the class of 1852. He began his scientific studies in the Sheffield School at Yale and continued them at the universities of Munich and Berlin. Returning to this country, he was chosen professor of chemistry and physics at Troy University, where he remained nearly five years, being called

from there to Columbia. Professor Rood has won great distinction for himself in his science. He was one of the first to apply photography to the microscope and to take binocular pictures with that instrument. His original investigations have been numerous, including special studies of questions in mechanics, optics, acoustics, and electricity. His studies of the nature of the electric spark and the duration of the flashes are particularly interesting, involving the determination of more minute intervals of time than were ever before measured. In 1880 he devised a mercurial air pump giving an exhaustion of a degree that has never been attained by other pumps. The methods of photometry that he has originated and his investigations of the phenomena that depend on the physiology of vision are very ingenious, and he was the first to make quantitative experiments on color contrasts. He is a member of the American Association for the Advancement of Science and of the National Academy of Sciences, before which many of his most important memoirs were read.

DEPARTMENT OF GREEK AND LATIN.

The resumption of the academic exercises in October (1867) found two important departments of instruction unofficered. The veteran professor of Greek, whose masterly scholarship and whose signal services to the cause of classical education had won him a reputation as wide as the republic of letters and made him the pride of the institution with which he had been identified for nearly half a century, had passed away during the summer, and had descended to his rest full of years and full of honors.[1]

Dr. Anthon was born in New York City on the 19th of November, 1797. He was a Columbia man from the beginning, taking his first degree there in 1815. He studied law and was admitted to the bar in 1819, but in 1820 returned to the college in the capacity of adjunct professor of Greek and Latin. From that time to his death his connection with Columbia was never severed. He was a voluminous writer and an authority often sought. He prepared many text-books for colleges, edited an edition of Lempriere's Classical Dictionary, besides writing one himself, and published a dictionary of Greek and Latin Antiquities.

Happily for the cause of classical learning in the college, a worthy successor to our lamented fellow laborer was found without the necessity of seeking beyond our own ranks. Dr. Drisler has already established for himself a solid reputation as a profound investigator of Greek philology, and his transfer to the vacant chair was a measure so obviously appropriate that it was effected without a dissenting voice. By this transfer the chair of Latin was thrown open, and this has since been filled by the election of Prof. Charles Short, late president of Kenyon College, a gentleman who had come to us recommended by the highest testimonials, and who, in discharging the duties of the office as professor ad interim for some months previous to his election, had proved himself eminently efficient as an instructor and agreeable as an associate.[1]

[1] Report of President Barnard, June 1, 1886.

THE ELECTIVE SYSTEM.

These changes in the force of instruction immediately led to the first step in the development which characterized President Barnard's administration. Up to this time the course of instruction had been confined mainly, as President Barnard said, "to studies called par eminence disciplinary," and distinguishing this as the "gymnasial period." Since 1855, it has been seen, numerous attempts were made to advance to the university stage, but they had been ahead of their time, and the real development began with the creation of the professional schools and the parallel expansion of the arts course.

In 1868 four books of Professor Davies's edition of Legendre's Geometry were added to the requirements for admission and thus a much greater amount of work in higher mathematics and allied subjects was made possible in the course. The establishment of the elective system followed closely upon this.

At the end of their junior year the class of 1870 sent a petition to the faculty requesting them to arrange a system of elective studies so that during the senior year the individual student might to a certain extent be able to choose what subjects he would pursue. This, of course, it was not within the power of the faculty to grant, but they referred it to the trustees, and by the middle of the following year, with the aid of the students of that class, a provisional course had been arranged for an experiment. During the second term instruction was conducted in accordance with this plan, which proved in a large degree successful. In the ensuing May a committee of the trustees was appointed to consider the expediency of extending and making permanent this more liberal system, and as a result the following arrangement was adopted: Of the fifteen hours a week occupied by the seniors in lectures and recitations, about half were spent on required subjects, and for the remainder the class was divided into sections according as the members desired to pursue higher classical, philosophical, mathematical, or scientific courses.

POST-GRADUATE WORK.

"The adoption of a liberal system of elective study of this description prepares a college to rise naturally and easily to the higher level of post-graduate instruction,"[1] says President Barnard, and this result, indeed, followed in Columbia. The first step was taken in 1878, when a provision was made for examinations for the degree of Master of Arts. The student was to pursue his studies outside of the college and could not be a candidate for examination until three years after graduation. No instruction was offered in the college for this degree, because it seemed impracticable for want of room and a sufficient corps of instructors. Before 1880, however, when the plan was to have gone

[1] President Barnard's Report, 1879.

into effect, these difficulties had been overcome. During a few years a large number of instructors were added and an entire reorganization of the college took place.

REORGANIZATION OF THE LAW SCHOOL.

In the law school five distinct professorships were created—

I. The law of contracts, maritime and admiralty law.

II. Real estate and equity jurisprudence.

III. Criminal law, torts, and procedure.

IV. Constitutional history and international and constitutional law and political science.

V. Medical jurisprudence.

The first of these was filled by the warden, Professor Dwight, the third by Mr. George Chase, who for four years had ably assisted Professor Dwight, the fifth by Professor Ordroneaux. To the second was elected the Hon. John F. Dillon, formerly judge of the United States circuit court in the eighth district, and to the fourth Prof. John W. Burgess. This professorship was a revival of the chair which had been created in 1865 when Dr. Lieber was transferred to this school and given the duty of delivering lectures on the State, embracing the origin, development, objects, and history of political society, and the laws and usages of war, on the history of political literature and on political ethics. Dr. Lieber continued his connection with the law school until he was removed by death in 1872, giving lectures on these special subjects, "in which," says Professor Dwight, "he had gained great distinction for his learning, originality, and independence of thought, extensive research, and sound judgment."

Professor Burgess was a graduate of Amherst College of the class of 1867. He had studied law two years, but through the recommendation of President Seelye went to Knox College, Galesburg, Ill., where he taught English literature and political economy from 1869 to 1871. He then went to Germany to study history and political science in Göttingen, Leipzig, and Berlin. In 1873 Professor Burgess was called to the newly established chair in history and political science in his alma mater, where he lectured with extraordinary success until 1876, when he was invited to the similar chair in Columbia.

NEW PROFESSORS IN THE SCHOOL OF MINES.

Professor Vinton having resigned the chair of civil and mining engineering, William P. Trowbridge, Ph. D., LL. D., was elected in his place. Dr. Trowbridge was a graduate of the United States Military Academy. Standing at the head of the class of 1848, he was promoted second lieutenant in the Corps of Engineers and spent two years in the astronomical observatory preparing for coast-survey work. He was assigned to duty in the primary triangulation of the coast of Maine. In 1853 he was sent to the Pacific, where he was occupied

three years conducting a series of tidal and magnetic observations along the coast from San Diego to Puget Sound. After serving one year as professor in the University of Michigan, he was again appointed on the coast survey and was engaged in preparing for publication the results of the Gulf Stream exploration. In 1860 he went to Key West to superintend the erection of a self-registering magnetic observatory, and he prepared minute descriptions of the Southern coast for the use of the Navy. During the war he was in charge of the engineer office in New York City, where his duties included the supply of materials for fortifications and other defences and the construction and shipping of engineer equipage for armies in the field. He constructed the fort at Willets Point, and was in charge of the repairs at Fort Schuyler and of the works on Governors Island. In 1865 he became vice-president of the Novelty Iron Works in New York City, with the direction of their shops. He was elected professor of dynamical engineering at the Sheffield Scientific School, remaining there from 1869 until he was called to Columbia. Dr. Trowbridge has held many honorable offices, both State and civic. He is a member of the National Academy of Sciences, the New York Academy of Sciences, and the American Association for the Advancement of Science.

On his election the title of the chair was changed and he became professor of engineering. At the same time Henry S. Munroe, E. M., Ph. D., was made adjunct professor of surveying and practical mining, and a few years later Frederick R. Hutton, A. M., E. M., C. E., Ph. D., was made adjunct professor of mechanical engineering. Besides professors, there were in this school a steadily increasing number of lecturers, instructors, and assistants.

CHANGES IN THE SCHOOL OF ARTS.

Prior to 1876 the only assistants in the school of arts were in the classical department and in the department of English—in the former Dr. A. C. Merriam, tutor in both Greek and Latin; in the latter, Dr. John D. Quackenboss, now adjunct professor in the same department. This force was now increased by the appointment of a tutor in Latin, Dr. Sydney G. Ashmore, and a tutor in mathematics, Mr. Frank Drisler. This was followed by the appointment of Mr. Richmond Mayo Smith, of Amherst, as adjunct professor of history and political science, to share the labors of Professor Burgess; and of Dr. Archibald Alexander as adjunct professor of moral and intellectual philosophy. During the year 1879–80 additional tutors were appointed in Anglo-Saxon, French, German, Greek, Latin, and mathematics. Finally, in anticipation of the increased work, the aged and distinguished Dr. Henry I. Schmidt was honorably retired to the rank of emeritus professor. To his chair was elected Mr. Charles Sprague Smith, who afterwards, with the aid of Dr. Hjalmar Hjorth Boyesen, so thoroughly organized the department of modern languages.

The first and most important obstacle to the founding of post-graduate courses having been overcome by this reorganization, the other disappeared on the completion of Hamilton Hall, a fully equipped building with a frontage of 200 feet on Madison avenue and a depth of about 60 feet on both Forty-ninth and Fiftieth streets, erected, at a cost of over $200,000, for the accommodation of the school of arts.

DEVELOPMENT OF THE POST-GRADUATE SCHEME.

In accordance with a resolution of the trustees, dated June 7, 1880, a scheme of instruction was drawn up to go into effect the following fall. This course was open to all bachelors of arts, of science, and of philosophy of this or of any other college of equal standing, and the degree of master of arts was conferred at its completion. The scheme provided for three hours a week each in Greek, Latin, mathematics, and history; four hours in astronomy, two practical and two theoretical; two hours each in physics, chemistry, philosophy, English literature, political economy, Anglo-Saxon, and Sanskrit, and one hour each in Italian and Spanish literature, besides which the following lecture courses in the school of mines were open to members of this department: Chemistry, general, theoretic, and applied; botany, zoology, geology, paleontology, mineralogy, and crystallography.

This system was capable of indefinite expansion and within one decade resulted in the thorough establishment of the university, to which President Barnard had so long looked forward.

ESTABLISHMENT OF THE SCHOOL OF POLITICAL SCIENCE.

The first university faculty was created on the 7th of June, 1880, when it was resolved "that there be established a school, designed to prepare young men for the duties of public life, to be entitled a School of Political Science, having a definitely prescribed curriculum of study extending over a period of three years and embracing the history of philosophy, the history of the literature of the political sciences, the general constitutional history of England and the United States, the Roman law and the jurisprudence of existing codes derived therefrom, the comparative constitutional law of European states and of the United States and of different States of the American Union, the history of diplomacy, international law, systems of administration, State and national, of the United States and comparison with European systems; political economy and statistics.

In speaking of the study of the political sciences in 1882, Professor Burgess said:

> During the last half decade an awakening of interest in the study of the political sciences has manifested itself throughout the public at large, such as no previous generation since the beginning of our national existence has experienced. The conviction is now already deep and general that, unless a sounder political wisdom and a better political practice be attained, the republican system may become but a form and republican institutions but a deception. It is then hardly

a question any more whether we need a higher political education. The common consciousness of the nation is already beyond that point, and is now occupied with the invention of the means and methods of its realization. Of course, chief among these means should stand our institutions of superior learning—our colleges and universities.

This "higher political education" is what Columbia aimed at giving her students in the foundation of the school of political science.

The whole structure of the course is built upon an historical foundation. "Theory and speculation in politics," says Professor Burgess, "must be regulated by historic fact." To this intent the student desiring admission is required to have completed the junior year in the school of arts or some other college of equal standing.

In this arrangement Columbia for the first time recognized the distinction between gymnasial and university work. Up to the close of the third year the courses in the school of arts are of a purely gymnasial character. University work begins with the senior year, and it is here that the elective system enables a student to select the subject in which he will continue his education. It is on this principle that the school of political science is open only to seniors.

A glance at the curriculum will show that the historical work does not stop with the end of the gymnasial course, but becomes rather a study of "the history of institutions, the origin and development of the State through its several phases of political organization down to the modern constitutional form." The student then advances through "history to the existing, actual, and legal relations of the State, . . . and finally through comprehensive comparison to generalize the ultimate principles of our political philosophy, aiming thus to escape the dangers of a barren empiricism on the one side and of a baseless speculation on the other."

At the close of the first year is conferred the degree of bachelor of philosophy, which does not differ in character from the degree of bachelor of arts, and thus places the recipient on an equal plane with the student who has completed the fourth year in the school of arts. The final degree is given two years after the first, and to obtain this is a much more difficult matter. The requirements are threefold:

First, a direct oral examination of each candidate upon any or all of the courses pursued in the presence of the entire faculty and by each member of the same; second, collateral examinations upon Latin, German, and French languages, and third, the examination of an original dissertation prepared by the candidate upon a subject either assigned to him by the faculty of the school or selected by himself under their approval at least six months before the date of the examination. The candidate must furnish each member of the faculty with a copy of his dissertation at least one month before the date of the examination, and, at the time fixed, must appear before the assembled faculty of the school and defend his fact, his reasoning, and his conclusions against the criticism of each member of the same.

The successful candidate receives the degree of doctor of philosophy, or the degree cum laude, or magna cum laude, according to his ability.

The school of political science was opened on the 4th of October, 1880.

Its faculty edits The Political Science Quarterly, the first periodical of its kind published in this country.

Connected with the school is an academy of political science, a voluntary association of the graduates of the school, formed to carry on the studies which have been begun. Meetings are held at frequent intervals, at which papers are read and discussed. From the academy a lecturer is chosen each year to serve three years in the school, and thus the faculty is recruited and young thought and strength brought into it. Throughout the course the work in every department is of the highest character, comparing favorably with the best European schools.

EXPANSION OF THE SYSTEM.

Numerous and frequent changes in the elective system in the school of arts followed the opening of the school of political science, but the principle in both undergraduate and university work has remained the same. In the year 1883–84, history and the English language were the only obligatory studies in either the junior or senior years. This expansion proving too comprehensive, it was followed by a slight reaction, and has since been more gradual and logical.

The personnel of the college has altered very rapidly. Professor Nairne retired, receiving the title emeritus, and his chair was divided. Prof. Thomas R. Price was elected to the professorship of the English language and literature, while Dr. Archibald Alexander was promoted to the professorship of philosophy, ethics, and psychology.

The department of chemistry was enlarged and strengthened by the appointment of Profs. Pierre De Peyster Ricketts and Elwyn Waller to the chairs of assaying and analytical chemistry, and in this and the other departments of the school of mines a large number of instructors, assistants, and tutorial fellows were added.

In 1884 the Hon. Maj. John S. Billings, M. D., assistant surgeon-general of the United States, was appointed lecturer in sanitary engineering and hygiene. The lectures which this eminent physician delivered during the following three or four years formed the basis of the school of sanitary engineering, a department which has grown rapidly in the public favor.

Another very popular school, that of architecture, originated in 1881, when a chair in that subject was founded in the school of mines. To this professorship was called William R. Ware, B. S., a graduate of Harvard and of the Lawrence Scientific School, and sometime professor of architecture in the Massachusetts Institute of Technology. Through the efforts of Professor Ware this branch of study has been greatly developed. Architecture has been made the sixth separate department, a number of instructors and assistants have been

COLUMBIA UNIVERSITY—THE NEW LIBRARY.

appointed, and a valuable collection of architectural periodicals, drawings, and photographs has been made.

During this same year the course in astronomy was considerably extended. Mr. John Krom Rees, A. M., E. M., was appointed director of the observatory and professor of geodesy and practical astronomy. Very valuable instruction in the use of the instruments has been added since the completion of the new observatory.

A new library building was completed and occupied in 1883, at a cost of $400,000. It was situated on Forty-ninth street about the middle of the block, and was the most imposing feature of the beautiful group. On the first floor were arranged two commodious lecture rooms, with the necessary studies and offices for the law school. The remainder of the building was devoted to the library, and the whole surmounted by an astronomical observatory.

The new observatory contained a set of portable astronomical instruments, a 46-inch transit, by Troughton & Simms; a combined transit and zenith instrument for time and latitude determinations; an equatorially mounted refractor of 5 inches aperture, to which was attached a spectroscope with the dispersive power of 12 flint-glass prisms of 55 degrees, by Alvin Clark; also a diffraction spectroscope with grating by L. M. Rutherfurd, esq. A set of comparison apparatus, with electrodes, Plücher's tubes, coils, etc., accompanied the spectroscope. Several valuable additions have lately been made to the observatory equipment.

REMOVAL OF THE LAW SCHOOL.

In 1883 the law school was moved to new quarters on the college block. It had been feared that removal to such a distance from the city courts would cripple the usefulness of the school, but this fear has proved groundless. The school has increased steadily in numbers and efficiency. There have been established three prize tutorships of the annual value of $500 each. The first of these was awarded in 1883, and one has been awarded each year since, thus supplying the school with three fellow assistants.

At the time of President Barnard's death the number of students in this school had reached 477, and on the 7th of May, 1888, the following important resolution was passed by the trustees:

Resolved, That from the commencement of the scholastic year of 1888–89 the degree of bachelor of laws shall be conferred only upon students, hereafter matriculating for the first time, who shall have pursued a three-years' course.

Several times propositions had been made to confer upon graduates of the law school the higher degree of master of laws. Various plans were suggested for requiring one or two years of additional study or for conferring it only on bachelors of law who were already bachelors of arts. It was, however, very forcibly argued by President Barnard that the bachelor's degree was too easily obtainable, and that the offering of a higher degree would only increase an already existing evil.

For a number of years no examinations were required for entrance to the law school, and even after their introduction they remained very insignificant, the result being, as President Barnard said, that numbers of men going through the law school without proper preliminary training "go to swell the already great and constantly growing number of uneducated lawyers." It should be the object of a great university not so much to make "lawyers" as to make men "learned in the law."

Two new professorships were created and able men were elected to do the additional work.

THE LIBRARY.

The university library, which was directly over the law school, was so situated as to be easy of access from any portion of the college. Approaching from either side by a flight of stone steps one entered a rectangular room 36 by 50 feet, flanked by stacks for books and broken in height by two tiers of galleries. This room contained the loan desk and "opens into the reading room by means of a pointed arch so wide and lofty that the two form indeed but a single great apartment, the arch coming toward the end of one of the longer sides of the reading room. This is lighted by large windows above, and small ones, rather widely spaced, below, thus affording the best illumination while avoiding the shut up feeling that comes when all the openings are above the level of the eye. The ceiling is a barrel vault supported on either side by a semivault of similar section. * * * The finish here as in other parts of the building is of brick slightly glazed as to surface. The color is pale yellow diversified by bands of dull red, applied in no strictly symmetrical way but with a skill which at once emphasizes dimensions and gives a desirable accent of freedom and variety."

The arch was the important feature of the room.

> Its beauty of form and great size (34 by 36 feet) give dignity and distinction to the whole composition, and turns what might have been a merely excellent into an extremely imposing apartment.[1]

The completion of this room made possible what had for many years been desired, namely, the uniting of the libraries of the different schools. The duty of arranging and cataloguing the 50,000 volumes, which up to this time had been scattered in nine different rooms, was intrusted to Mr. Melvil Dewey, of the Boston Library Bureau. The books were minutely classified and placed on shelves, to which the students had immediate access, and the library was open from 8.30 a. m. until 10 p. m. every day in the year except Sunday, Good Friday, Independence day, Thanksgiving, and Christmas. These privileges, extended in but few public libraries, were thoroughly appre-

[1] Recent Architecture in America, by M. G. Van Rensselaer, Century Magazine, 1884, p. 67.

ciated by the students, and the library is in constant use. The number of books has grown until it is considerably over 100,000, and is increasing at the rate of a thousand a month. It is surpassed in numbers by but two university libraries in America. Books are loaned only to officers, students, and alumni, but any respectable person is free to use the library for scholarly purposes. In his inaugural address President Low said:

> There is no library in the city, I venture to think there is none in the country, where the student is more welcome, where the facilities granted him are so great. No part of the college system is more liberally supported or more generously dealt with, for it is recognized to be a laboratory of all the departments of the college.

Besides what may be spoken of as the general library, there is a special library of political science, intended to include the most recent and most valuable European and American works, particular attention being given to providing the material needed for original investigation. The department of history and political science alone contains 18,000 volumes.

The law library, of about 10,000 volumes, contains a complete series of the reports and statutes of the United States and of New York; full sets of the reports of nearly all the other States, with statutes and digests; a full series of the English and Irish reports from the yearbooks to the present time, with the English and Irish statutes and digests; the leading treatises on English and American private law; the best editions of the Roman civil law and the leading commentaries on it, both ancient and modern, and the codes, legislative acts, and special treatises on the law of Germany, France, Italy, and other nations, including the South American States. It includes the original law library of William Samuel Johnson, the first president of Columbia College after the Revolution, and one of the framers of the Constitution of the United States; also the law library of John Jay, the first Chief Justice of the United States, and is especially rich in international, constitutional, and administrative law.

The library also contains, in pure and applied science, an unusually fine collection of periodicals and serials, including complete sets of nearly all the important English, French, and German journals in chemistry, chemical technology, mining, metallurgy, engineering in its various branches, electric science, photography, public hygiene, pure mathematics, astronomy, geology, botany, and kindred sciences. The number of current periodicals and serials taken is more than 800, and the funds at the disposal of the library for the purchase of books enable the officers of instruction in the various departments to put into the library the latest treatises and monographs on their respective subjects.

Besides the library, the property of the college, the students have also access to the library of the New York Academy of Sciences.

This collection consists of about 6,000 volumes, largely made up of the proceedings of learned societies of America and Europe, and is deposited in the library.

THE HERBARIA.

The president's report for 1869 contains a description of the herbarium, as it existed at that time, written by Dr. Torrey, by whom the larger portion of it was presented to the college:

The collection is peculiarly rich in what are called type specimens, being the identical plants named by the authors who have described or noticed them in their published works. The college herbarium is the standard for many works on North American botany, such as The Flora of the Northern and Middle States; The Flora of North America, by Torrey and Gray; The Flora of the State of New York; nearly all of Dr. Gray's works and those of Engelmann, Sullivant, Tuckerman, Chapman, and many others.

The botanical collections of nearly all the United States Pacific railroad surveys were made the subject of special reports, which were published by order of Congress; and the type specimens, with few exceptions, are in our herbarium. So are those extensive collections made by the Government botanists in the five or six years occupied in the Mexican boundary survey. Full sets of the plants were reserved for reference. We have also an extensive collection of plants from the United States North Pacific exploring expedition, under Commodores Rodgers and Ringgold, and many from Commodore Perry's Japan expedition.

All the plants obtained by Fremont in his explorations are preserved in the college herbarium. We have nearly every plant described in the valuable botany of the States north of Virginia and west to the Mississippi, by Dr. Gray; and of Dr. Chapman's Southern Flora, identified by the authors themselves.

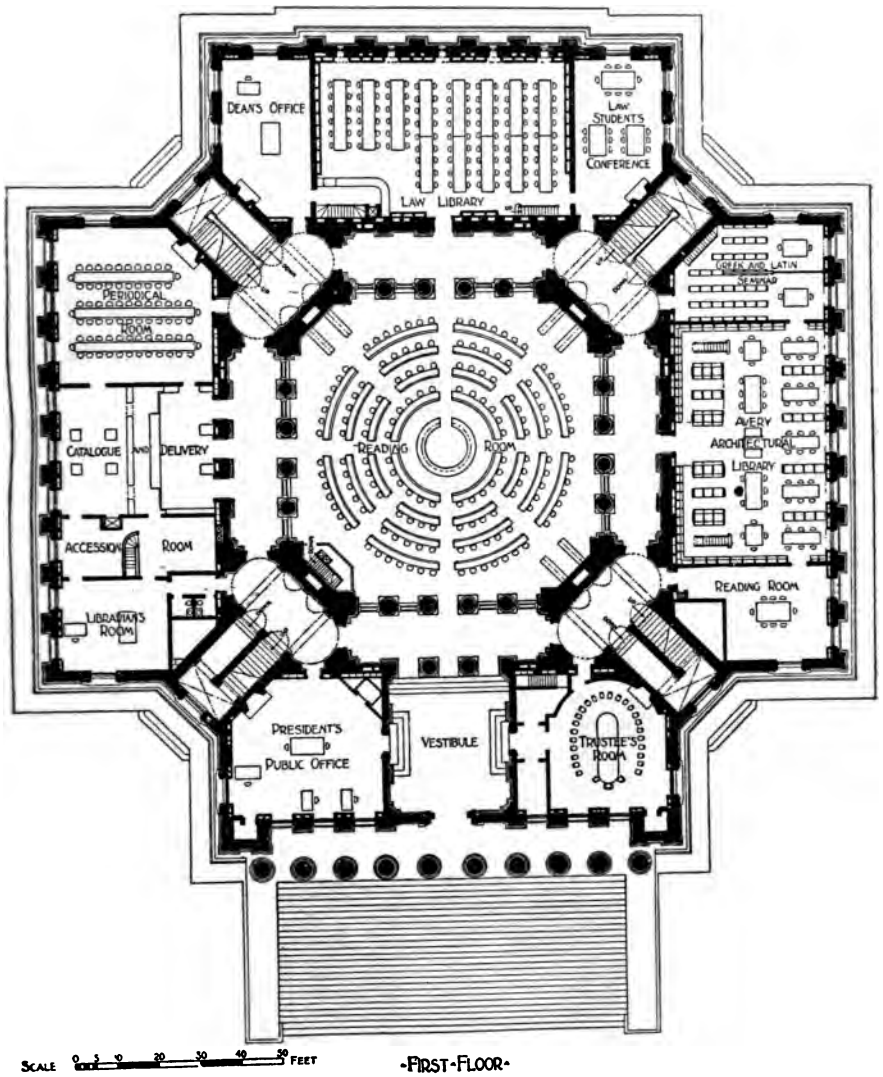
Of California plants we have very full collections, and in a fine state of preservation. The Rocky Mountains, Utah, and Colorado are well represented by what we have received from most of the explorers of those regions. Indeed we have been so fortunate as to have received sets of plants from nearly all the botanists who have visited or surveyed the remote parts of North America, even beyond the Arctic circle. Many of these were received through the kindness of Sir William Hooker, to whose charge were committed, by the British Government, the various collections made in the Hudson Bay regions to the Pacific coast. His extensive Flora of British America was founded on these collections, and the author of that splendid work shared them liberally with us. We have also many plants from Alaska, some of them received before we purchased that Territory.

The botany of the Southwestern States is well represented in the college herbarium. . . .

Of foreign plants we have vast numbers, embracing almost a complete flora of Europe, named by distinguished botanists, with a good number from Africa, especially those of the Cape of Good Hope, many of them types of what are described in the Cape Flora of Harvey and Sonder, recently published by the British Government.

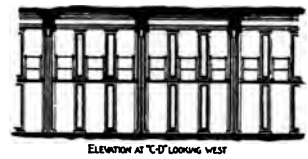
In East India botany we are rich, having received liberally of the plants collected under the auspices of the British Government. China has furnished us with many rare species, and we have lately been very largely supplied with choice Japan plants from the botanists of the Imperial botanic garden of St. Petersburg. A special interest is felt in the botany of Japan, since it has been shown that its flora is so nearly related to that of North America, and the specimens received from St. Petersburg are all originals of a late flora of Japan.[1]

[1] Report of President Barnard to the trustees, 1869.

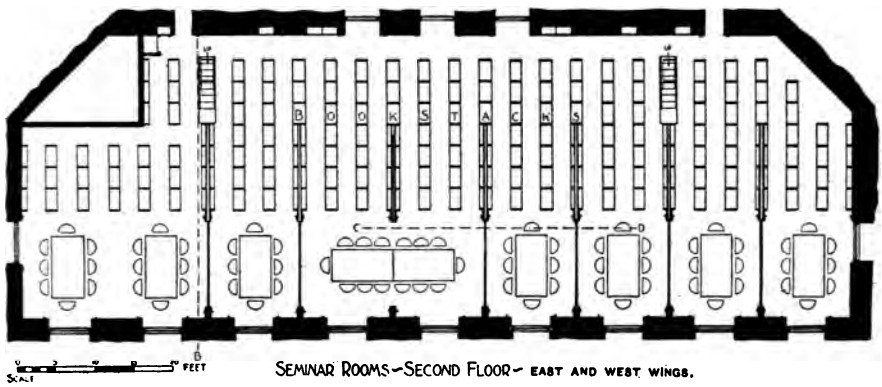


COLUMBIA UNIVERSITY—THE LIBRARY.

ELEVATION AT "A-B" LOOKING NORTH



ELEVATION AT "C-D" LOOKING WEST



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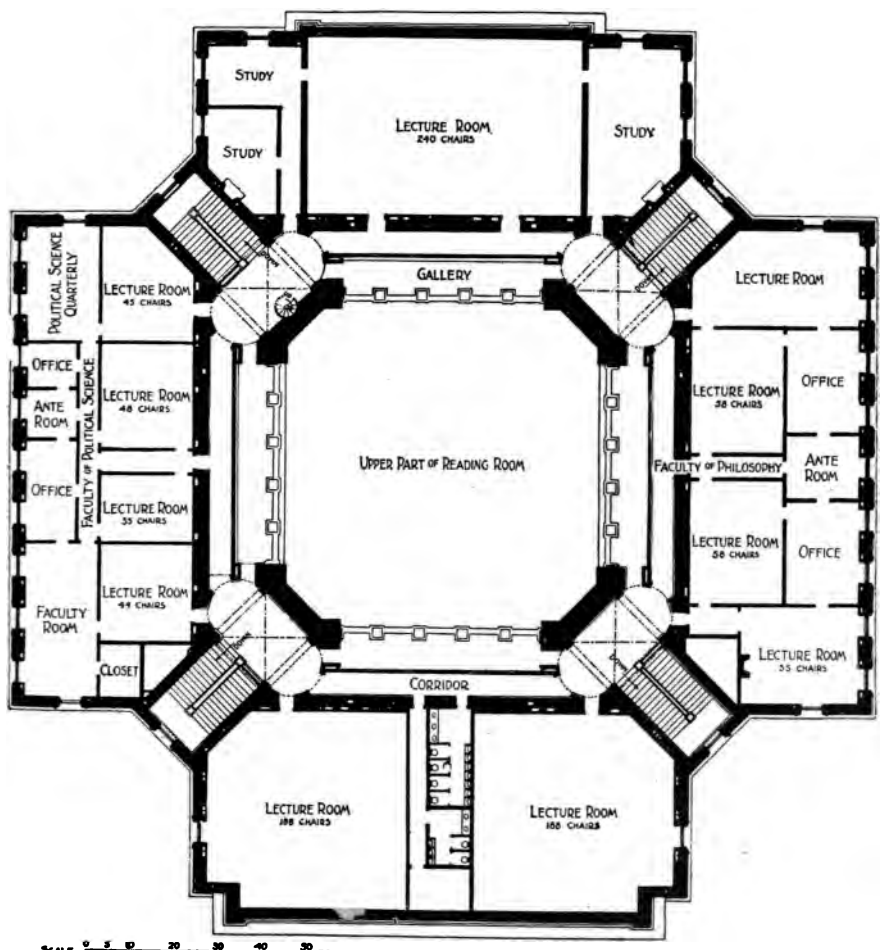
SEMINAR ROOMS—SECOND FLOOR—EAST AND WEST WINGS.



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• THIRD • FLOOR •

In 1874 the very extensive collection of the late Professor Meisner, of Basle, Switzerland, especially rich in South American, Asiatic, and Australian species, and supplementing the Torrey herbarium to a remarkable degree, together with the herbarium of Dr. A. W. Chapman, of Florida, containing nearly all the species described in the Flora of the Southern United States, were purchased by Mr. John J. Crooke, of New York, and presented to the college.

The personal bryological collection of the late Mr. C. F. Austin, containing all of Austin's types of mosses and some of his Hepaticæ, has since been purchased.[1]

Dr. N. L. Britton, adjunct professor of botany, has been active in the development of this department.

Besides many papers, monographs, and scientific sketches, he has published a Catalogue of the Flora of Richmond County, Staten Island (1879), The Geology of Staten Island (1880), Preliminary Catalogue of the Flora of New Jersey (1882), Catalogue of Plants found in New Jersey (1889).

On the completion of the new library building the trustees voted that the herbarium should be considered a part of the botanical library and should be kept in one of the rooms of the new building.

The botanical library is placed around the walls of the room; it comprises about 2,000 bound volumes and an equal number of pamphlets, and is rapidly increasing in bulk.[1]

CABINETS AND COLLECTIONS.

In addition to the herbaria the college has equally valuable collections of specimens and models illustrating all the other subjects taught in the school of mines.

The lectures on crystallography are illustrated by a collection of 150 models in glass, which show the axes of the crystals and the relation of the derived to the primitive form. This suite is completed by 400 models in wood showing most of the actual and theoretical forms, and also by a collection of natural crystals showing the forms as they actually occur in the prominent mineral species.

The cabinet of minerals comprises about 30,000 specimens, arranged in cases. It includes a large suite of pseudomorphs, a collection illustrating the physical characters of minerals, and a collection illustrating crystallography by natural crystals, showing both their normal and distorted forms. The minerals are accompanied by a large collection of models in wood showing the crystalline form of each. Arranged in wall cases are large specimens showing the association of the minerals. There are also three separate student collections of average specimens, amounting in the aggregate to over 6,000.

A very complete collection of metallurgical products, illustrating the different stages of the type process in the extraction of each metal in this country and in Europe, is accessible to the students, and the collection is constantly increasing. An extensive collection of models

[1] Columbia College Herbaria, by Dr. N. L. Britton, Botanical Gazette, Vol. XII, No. 1.

of furnaces has been imported, and a very large number of working drawings of furnaces and machines used in the different processes.

Applied chemistry is illustrated by several thousand specimens of materials and products, arranged in a cabinet of industrial chemistry for exhibition at the lectures and for inspection by the students.

The geological collection consists of over 100,000 specimens, to which additions are constantly being made.

The departments of civil engineering, mechanical engineering, and mining engineering are fully illustrated by collections of appropriate models.

THE VANDERBILT GIFTS.

Soon after the completion of the new library and law school building the munificent gift of the late William H. Vanderbilt placed the college in possession of buildings for its medical department superior to any in this country. Mr. Vanderbilt presented to the college twenty-nine lots of land on Fifty-ninth street, Tenth avenue, and Sixtieth street for the erection thereon from time to time of suitable buildings for instruction in the science of medicine. These lots were valued at $200,000, and to this gift he added $300,000 in money as a building fund. This princely and very opportune gift provided the school with buildings thoroughly equipped in the very best manner.

The generous benefactor lived but a short time after this, and on his death a hospital was built on the college grounds, by a gift from his four sons, as a memorial of their father. This is known as the Vanderbilt Clinic, and contains a fully equipped dispensary. At the same time a second hospital was built upon this block by one of the Vanderbilt family. Mr. William D. Sloane presented to the college $200,000, with which the Sloane Maternity Hospital was built. This contains 39 beds, all of which are free, having been endowed by Mrs. Sloane, a daughter of the late Mr. Vanderbilt. This hospital is also under the immediate supervision of the college professors, and a corps of 6 students from the graduating class are on duty each week in the term. Including the land, the three buildings, the equipment, and the endowment of the beds in the maternity hospital, over $1,000,000 has been expended by this family for the benefit of the medical profession. But the science of medicine does not receive the only benefit from this generosity. During the year 1889 over 102,000 persons were treated in the Vanderbilt Clinic.

The completion of these new quarters encouraged the faculty of medicine to take some important steps in the direction of increased usefulness. In 1880 the duration of the annual session had been extended from five months to seven. There was a large increase in the number of students in the following year. It is also encouraging to note that the majority of the students chose of their own accord to spend three years in the school instead of finishing as was possi-

ble, in two. This action was encouraged by raising the standard of examinations and making it possible for a student to pass final examinations in certain of his subjects at the end of his second year. The result was the establishment in 1887 of a graded course covering a period of three years, thus making it possible to offer much more detailed and thorough instruction.[1]

The next step was the requiring of examinations for admission to the course. This had long been considered a desirable measure in the interest of the profession. The college adopted a schedule of entrance examinations, making it prerequisite to matriculation that the student should show a fair proficiency in the English and Latin languages, arithmetic, algebra, and geometry, such as is usually demanded for entrance in advanced literary colleges. The immediate effect of this was to greatly decrease the number of students, but it has placed the college on a much higher level.

DEATH OF DR. SHORT.

A very sad loss occurred in the latter part of President Barnard's administration in the unexpected death of the eminent Latin professor, Dr. Short, who died on the 24th of December, 1886. "Dr. Short," says the Rev. Talbot W. Chambers, "was remarkable as a painstaking scholar, who would have contributed more to classical literature but for his reluctance to let anything pass from his pen till he had expended his ability upon it." Graduated at Harvard in 1846, he spent his entire life as an educator, a portion of it in the presidency of Kenyon College, Ohio. Three years after his call to Columbia he was appointed a member of the American committee for the revision of the New Testament, and subsequently became secretary of that body. He was a member of many learned societies, to which he contributed papers of much originality. His work includes revisions of Schmitz and Zumpt's Advanced Latin Exercises and Mitchell's Ancient Geography. He wrote an essay on the order of words in Attic-Greek prose, which is prefixed to Young's English-Greek Lexicon, and is the most exhaustive treatise that has been written upon the subject. He also edited, in conjunction with Dr. Carlton T. Lewis, a new edition of Andrew's Freund's Latin Lexicon. Dr. Short was an active Christian and a good churchman. For a number of years he was a vestryman of St. Thomas Church, where a tablet has been placed to his memory.

The chair in the Latin language and literature left vacant by the demise of Dr. Short was subsequently filled by the election of an alumnus of the college, Dr. Harry Thurston Peck, a young man of marked ability, who had shown himself eminently fitted for the responsible position intrusted to him.

[1] The course has since been extended to four years, the length of time now required in all reputable schools.

RESIGNATION OF PRESIDENT BARNARD.

In June, 1888, President Barnard, admonished by a severe sickness that his increasing age would soon necessitate his retirement from active life, offered his resignation of the presidency. The board of trustees sought by passing a series of resolutions to express their sympathy in the impaired condition of their leader's health and their sincere and deep regret of the action made necessary by it. It was resolved—

That this board attest with pride and pleasure the widespread fame of the distinguished head of the college and share in the general admiration for his extraordinary attainments, his ability as an educator, and the modest simplicity and dignity which have uniformly characterized his manners and life.

Resolved, That President Barnard be granted a leave of absence for one year from date or until the election and installation of his successor.

Resolved, That when the time comes to install his successor the board confer on the retiring president the rank and title of president emeritus and that his salary be continued during the remainder of his life.

Dr. Drisler was requested to undertake the duties of the presidency and it was hoped that Dr. Barnard would live to complete his twenty-fifth year in office, but in the spring of 1889 he passed to his eternal rest.

What the college was when President Barnard was called to it in 1864 has been seen; his last report shows it to have been a university consisting of the college proper, the nucleus, called the school of arts, with its graduate department and four associated schools, the medical school, the law school, the school of political science, and the school of applied sciences, called the school of mines. This latter was divided into seven departments each of which was practically a school by itself—a school of mining engineering, a school of civil engineering, a school of metallurgy, a school of geology and paleontology, a school of analytical and applied chemistry, a school of architecture, and a school of sanitary engineering.

The school of arts offered an extensive elective system, the graduate department, together with the school of political science, offered almost all the advantages given under the faculty of philosophy in foreign universities, while the professional and scientific schools had attained a degree of excellence unsurpassed in this country.

There were in the college 1,863 students, of whom 51 were matriculated in two or more schools. Four hundred and fifteen degrees were given in President Barnard's last year, 28 in the school of political science, 56 in the school of mines, 106 in the school of medicine, 110 in the school of law, and 115 in the school of arts.[1] The corps of instructors consisted of 45 professors, 12 adjunct professors, 10 lecturers, 16 instructors, 6 tutors, 76 assistants, and 36 fellows.

[1] This number includes honorary degrees conferred at the centennial celebration.

ADMINISTRATION OF DR. DRISLER.

Nothing of great importance to history could be done while the college was without a head, but Acting President Drisler won a place for himself in the hearts of all Columbia men by the faithful care he took of the welfare of the college, and the work of his successor was made lighter by the fact that no backward steps were taken. It was owing to his faithfulness, indeed, that the trustees were able to give such deliberate attention to the selection of a new president. Their appreciation of his services was evinced by their action on the 10th of February, 1890, when it was—

Resolved, That in the administration of Prof. Henry Drisler, LL. D., as acting president of Columbia College, an office for which he was admirably equipped by his sense of its responsibility and by exalted personal character, as well as by profound learning and sound judgment, and an experience of nearly fifty years of service in the college as an officer of the institution, the trustees gratefully acknowledge the ability and faithfulness with which the duties of the position have been performed.

That they record with satisfaction the continued usefulness and prosperity of the college under Professor Drisler's management, which they recognize as having been wise and conservative in maintaining academic traditions, as well as progressive in its hearty sympathy with the healthful activity of all the schools of the college.

Further resolutions provided for the promotion of Professor Drisler to the position of dean of the school of arts.

It was during Dr. Drisler's administration that what promises to be one of the most useful schools of the college was opened. The prominence which electricity has of late taken in the world of science led the trustees to establish a school in electrical engineering and to appropriate sufficient funds for the erection of a thoroughly equipped building for its accommodation. The course in this school, as well as the course in sanitary engineering, was made postgraduate to the school of mines, and thus another step taken in the direction of a university.

Shortly before his retirement Dr. Barnard had said:

Universities are a want of the country which must and will be supplied: but they can not spring into being full panoplied, like Minerva from the head of Jupiter. They must grow by gradual accretion continued through a long series of years, and no such accretion can take place except around an existing nucleus. . . .

She [Columbia] is the nucleus of what will one day be the great university of the city—possibly of the continent; and it should be an encouragement to all who have any ambition to see our city as preeminent in its literary and scientific character as it is in its population, its commerce, and its wealth, that she is a nucleus so substantial already; so sound and solid at the core, that all future accretions will adhere to her firmly and constitute the elements of a healthy growth.[1]

Throughout Dr. Barnard's long administration Columbia had steadily grown in this direction. The possibility which he had fore-

[1] President Barnard's Report, 1886.

seen was accomplished in all but form and name. Fortunately for the college, the wisdom which has characterized the board of trustees since their creation did not desert them now, and mature deliberation enabled them to select as a successor to President Barnard a man who was exceptionally well fitted to continue the work and lead the college toward its goal—the metropolitan university.

ACCESSION OF PRESIDENT LOW.

On the 7th of October, 1889, Hon. Seth Low, LL. D., one of her own alumni, was elected to the presidency of the college. President Low is the son of Mr. Abiel A. Low, a well-known merchant of Burling Slip. He was born in Brooklyn, and his early education was obtained at the Brooklyn Polytechnic Institute, where he was prepared for Columbia. He was graduated in 1870, standing at the head of his class. He then went abroad and spent several years in travel, after which he entered his father's mercantile house, where he subsequently became a partner. He was elected a member of the chamber of commerce, served on several important committees, and achieved a creditable distinction for a series of addresses made before that body on the trade and commerce of New York and kindred subjects. In 1880 he took a prominent part in national politics, founding the "Young Republican Club," which has since become a permanent organization of considerable importance. His impressiveness as a public speaker placed him conspicuously before the people and gained for him a wide celebrity. When a year later the people of Brooklyn were called upon under their new charter to elect a mayor with greatly increased responsibilities, Mr. Low was chosen by a flatteringly large majority. To this office he was reelected in 1883, and throughout both terms his administration was signalized by the display of extraordinary executive abilities. He sank partisanship, reconstructed municipal matters throughout, and gave the city a real reform administration. After his retirement he went abroad again, and on his return resumed his commercial occupation. In 1881 he was elected a trustee of Columbia, in which office he afforded his associates ample opportunities for learning his peculiar fitness for the high position to which they elected him.

His new honors were borne with becoming modesty. In his letter of acceptance he said:

> The honor is at the same time the summons to a duty which I may not decline. I accept, therefore, the position to which I have been chosen with grateful thanks to my colleagues for this culminating mark of their confidence and good will and with the assurance that I will do everything in my power to justify their judgment.

At his own suggestion and with the advice of Dr. Drisler, President Low did not enter upon his duties until the beginning of the second term, when appropriate installation ceremonies were held on the 3d of February, 1890.

In his inaugural address, after mentioning among Columbia's many eminent alumni Alexander Hamilton, John Jay, DeWitt Clinton, and Hamilton Fish, President Low said:

> The value of the college to New York is not to be measured by the services of her conspicuous sons. Her chief and permanent value to the city lies in the constant witness she bears to the usefulness and nobility of the intellectual life and in the work she is always doing to develop and uplift that life. Columbia College, college and university both as she really is, holds aloft this ideal in the great city where finance and commerce show alike their good and their bad sides. Her influence makes always to strengthen the things which are good. In her financial management she illustrates a business trust faithfully administered without a breach for one hundred and thirty years. On her educational side she displays the splendid usefulness of money which is received not to be hoarded, but to be well spent. She is profoundly conscious that what she is doing is but the earnest of what she yet may do if New York will but make common cause with her and enlarge and broaden and deepen her work on every side.
>
> The city also may be made, to a considerable extent, a part of the university. All about us lie its galleries, its museums, and its libraries. Best of all, here are are its men, the most eminent in their calling in every walk of life. Let us bring these men in every possible way into vital touch with our work, and we shall see a university of which the whole country shall be proud.

Administration of President Low.[1]

The distinctive features of President Low's administration are the simplification of the university organization; the growth in the number of university faculties and in the real university work done; the gratifying general development of both college and university in numbers and equipment; the affiliation of the university with various educational agencies in the city and the closer contact with the life of the city itself.

Columbia had formed a high ideal of university organization and work thirty years before, and had during the last year of President Barnard's administration been working rapidly toward it. University work, not merely in the professional schools, but in certain departments of pure science, notably in economics and politics, had for several years before the accession of Mr. Low been successfully carried on. The relations of the different departments of the university in this work, however, were not systematized. Certain tentative changes were made immediately after the inauguration of Mr. Low as president. After a short trial this tentative reorganization was retained for the most part with further modifications seen to be necessary.

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[1] The remainder of the sketch of Columbia was written by Sidney Sherwood. The chapter which had been written by Mr. Hathaway described the organization as it was in 1891. To make the present condition of the university most easily intelligible it seemed best to pass over more lightly the first steps in the transformation wrought by President Low, and to bring out in clearer relief the latest status. While Mr. Hathaway's chapter as a whole has been discarded, a part of his material has been used.

The administrative key of the reorganized system is the university council, established in 1890 as a board of advisers to the president upon university matters, but afterwards constituted a definite body in the government of the university, representative of the various faculties and invested with large powers.

The most lucid account of the reorganization is to be found in the annual reports of the president, those of 1890 and of 1892, respectively.

ORGANIZATION AT THE ACCESSION OF PRESIDENT LOW.

Mr. Low, in his report of 1890, says:

On the 6th of February, 1890, Columbia College in the city of New York consisted of the School of Arts, or the college proper, founded in 1754; the School of Law, established in 1858; the School of Mines, established in 1864, and the School of Political Science, established in 1880. In addition to these schools, which are under the direct control of the trustees of the college, the College of Physicians and Surgeons had become in 1860, by joint resolution of its own board of trustees and the trustees of Columbia, the medical department of Columbia College. The president, however, and this board have no responsibility as toward the medical department, and this report, therefore, will concern itself at this point with the other schools only.

Each of these schools, the School of Arts, the School of Law, the School of Mines, and the School of Political Science, had its own faculty, and each school was administered without any reference to the others, almost without any consciousness of the others.

"No degree could be had except by pursuing the complete course in some one school," although it was possible in some instances to have work taken outside one of the schools count for a degree in that school. In such a case, however, additional fees had to be paid.

What seemed especially to be needed from the point of view of the student was such a unification of the institution as would make its varied opportunities more available to these students where equipment and capabilities justified them in desiring to study in more than one school.

As toward the trustees, also, the existing situation had developed embarrassments.

All of the scientific professors in the faculty of the School of Arts had seats also in the faculty of the School of Mines. In another instance, one professor sat in the three faculties of arts, law, and political science. When, therefore, the judgment of the teaching faculties of the entire institution was sought by the trustees, it had become necessary to direct that no professor should vote in more than one faculty. It was clear to all concerned that somebody ought to be constituted which should represent to the trustees the teaching mind of the institution in all its parts. The problem was to secure a body which would be accepted as fairly representative by all the members of every faculty.

Again, the graduate work, for which were given the higher degrees of master of arts and doctor of philosophy, stood in need of organization. It had grown to considerable proportions, but for the most part it depended too much upon individual professors. There was no general standard to which all must conform. In the School of Political Science, it is true, this work represented a large part of the labors of the faculty, for, with the exception of the first year, it is a graduate

school; but in the School of Arts and the School of Mines the graduate work was a mere incident. For this purpose, also, it was necessary to secure a body which could, in effect, direct the graduate work where it concerned itself with more than one school, and provide a common standard for all the schools. Incidentally, it was desirable, if possible, to place this work in its general phases under the charge of faculties rather than of individuals.

It thus appears from these different points of view that the first thing necessary in any reorganization was to secure the central body which would unify the institution in the various directions indicated, thus enabling it to be operated as one whole instead of as so many parts. The one essential condition in relation to such a body was that it should be felt to be and be accepted, by both trustees and professors, as thoroughly and fairly representative of the entire institution. Prior to my election the trustees had in fact decided that there should be such a body, to be known as an academic or university council. When I assumed the duties of my office, it remained to be decided how this body should be composed, and what precisely should be its function. It was the common opinion, also, that there should be created a faculty of philosophy, to have charge of the advanced work in philosophy, philology, and letters. Such a faculty, if created, made it possible to divide all the professors in the institution into homogeneous groups, of which groups no professor should be in more than one.

THE PRESENT ORGANIZATION.

"Columbia University at the present time consists of the School of Arts, the original college founded in 1754; of sundry professional schools, to wit, the School of Law, the College of Physicians and Surgeons, and the School of Mines, admission to all of which, as candidates for professional degrees, is open to all students whether or not they are college-bred men; and of the university faculties of Law, Medicine, Mines (Applied Science), Political Science, Philosophy, and Pure Science, which conduct all courses leading to the university degrees of Master of Arts and Doctor of Philosophy.

"The point of contact between the college and the university is the senior year in the School of Arts, during which year students in the School of Arts pursue their studies, with the consent of the faculty of arts, under one or more of the university faculties. The term 'university faculties' includes all the faculties except the faculty of arts.

"The various schools are under the charge of their own faculties, and for the better conduct of the strictly university work, as well as of the whole institution, a university council has been established."[1]

THE UNIVERSITY COUNCIL.

"The university council consists of the president, the deans of the several university faculties, and of a representative chosen from and by each faculty for the term of three years, and of the dean and the secretary of the School of Arts ex officio.

"The council (subject to the reserved power of control by the trustees) has power, and it is its duty, in all matters not referred by statute to the president or the several faculties—

[1] Columbia College. Historical sketch and present condition. New York, April, 1893, p. 16.

"To fix and determine the conditions upon which the degrees of Master of Arts (Master of Laws by amendment, June 5, 1893) and Doctor of Philosophy shall be conferred, and to recommend candidates for such degrees;

"To secure the correlation of courses offered by the several university faculties, with a view to increasing the efficiency and enlarging the range of university work; to encourage original research; to adjust all questions involving more than one faculty;

"To make such recommendations, both to the trustees and to the several faculties, concerning the educational administration of the university, as may seem to it proper, and to advise the president upon such matters as he may bring before it;

"To prescribe the form of the commencement exercises and to select the speakers;

"To appoint all fellows and to make rules for their government, subject to such restrictions as may be prescribed by the statutes or by the terms upon which the several fellowships are established.

"The council may invite a representative of the faculties of the General Protestant Episcopal and of the Union Theological seminaries, respectively, to sit with it, with power to advise only."[1]

ADMINISTRATIVE ORGANIZATION.

"From the administrative point of view it is almost more convenient to say that Columbia consists of the college, that is, the School of Arts, and of six university faculties—Law, Medicine, Mines, Political Science, Philosophy, and Pure Science—for while it is true that each of these faculties conducts a school, it is also true that they work together in giving instruction to an increasing body of students who seek instruction from more than one faculty. In other words, the Columbia that two years and a half ago consisted of four schools almost wholly unrelated to each other consists now of seven schools that are tied together by all the interests of a common life. The university council, established two years ago as an advisory body only, by the revised statutes has been made a body with ample powers, experience having shown that it was admirably adapted to serve as the principal organ of the faculties in directing the common life of the university. The council also serves as a unifying factor, consisting as it does of two members from every faculty, who constantly meet together to deal with questions of common concern."[2]

NEW FACULTIES ESTABLISHED.

In 1891 the College of Physicians and Surgeons surrendered its separate charter and became one of the university faculties of Columbia. An agreement was also entered into with the General and Union

[1] Columbia College. Historical sketch and present condition. New York, April, 1893. p. 16.

[2] President's Report, 1892, p. 7.

UNIVERSITY HALL. VIEW FROM THE EAST.

Theological seminaries providing certain reciprocal educational privileges and giving these institutions a qualified representation in the university council. In 1892 a school of pure science was established, the object of which was "to increase the opportunities for advanced work in mathematics and natural science on the part of the students who do not care to take any of the technical courses in the School of Mines." The faculty of this school also secured equal representation in the university council.

EDUCATIONAL ORGANIZATION.

The educational organization then consists of a college in the usual American meaning of the term, in which a four years' course of study leads to the degree of B. A., the last year of which, however, can be spent in work under university faculties; three professional schools, Law, Medicine, and Mines (the latter a technological school), and three schools in which scientific research is the chief aim—School of Political Science, School of Philosophy, and School of Pure Science.

The statute regulating the conferring of degrees is as follows:

> The president shall have power, when the requirements of the statutes shall have been satisfactorily fulfilled, to confer degrees as follows:
>
> *a.* The degree of Bachelor of Arts, upon the recommendation of the faculty of arts;
>
> *b.* The professional and technical degrees of Bachelor of Laws, upon the recommendation of the faculty of law; Doctor of Medicine, upon the recommendation of the faculty of medicine; and Bachelor of Science, Engineer of Mines, Civil Engineer, Metallurgical Engineer, Electrical Engineer, and Sanitary Engineer, upon the recommendation of the faculty of the School of Mines; and
>
> *c.* The degrees of Master of Arts, Master of Laws, and Doctor of Philosophy, upon the recommendation of the university council.[1]

THE WORK OF THE SEVERAL FACULTIES.

THE SCHOOL OF ARTS OR COLLEGE PROPER.

The minimum age on entrance is 15 years. The curriculum covers four years.

The studies of the freshman and sophomore years are for the most part obligatory. In the junior year, rhetoric, philosophy, history, and political economy are required, and eleven hours per week of elective studies are allowed and must be filled. In the senior year the studies are wholly elective and must occupy not less than fifteen hours per week. The first year courses of the school of law, the school of mines in any of its departments, and the college of physicians and surgeons are open to seniors.

THE SCHOOL OF LAW.

This is a professional school designed "to prepare students for practice in any State of the Union." Before Mr. Low became president it was almost entirely in the hands of its founder, Prof. Theodore

[1] Columbia College in the City of New York, etc., p. 16.

W. Dwight, and, while held by common opinion one of the best two law schools in the country, it was not entirely suited to the conditions of the later times. President Low found it necessary to reorganize it in the interests of more scholarly legal education, as well as to make it harmonize with his general policy of reorganization. Let him tell the story of the change in his own words:[1]

"The most important internal educational change of the year has been the reorganization of the law school. This was made necessary by the announcement in January of Prof. Theodore W. Dwight, the warden of the school, of his purpose to retire as an emeritus professor on July 1, 1891, under the resolutions of the trustees already alluded to. Dr. Dwight's notice of his intended retirement was followed almost immediately by the resignations of Profs. George Chase and Robert D. Petty, which resignations were accepted, as presented, to take effect June 30, at the end of the academic year. It is greatly to be regretted that in the law school the old order could not have passed into the new as easily and pleasantly as it has done in all other parts of the university. Historically the situation was exceptionally difficult, the initiative as to many points which properly belonged with the president having been with the warden from the formation of the school; but a fuller explanation of the complete break which has taken place is to be found in the wide differences of opinion which prevailed as to the future policy of the school. The differences between the new arrangement of the course and the old are clearly indicated by the following points:

"1. The new course assumes three years as the unit of the course, instead of adding a third year to the old two-years' course, as though that were a thing complete. This is in accordance with the report of the special committee, to which was referred the subject of a third-year's course in the law school, presented to the trustees May 7, 1888.

"2. The new course is based upon the concurrent study of different subjects.

"3. It permits the study of public law as part of the equipment for the degree.

"4. It adjusts the hours so as to discourage office work during the first two years, while facilitating it in the third year.

"5. The hours have been so arranged as to throw open to the students of law many privileges of study in other departments of university instruction which would otherwise be denied to them.

"6. The new course offers a broader range of choice in legal subjects by establishing numerous elective studies.

"7. It relieves the professors from repeating the same work twice a day, but it requires their attendance at the school through the entire academic year."

This change has been productive of good results. The relative

[1] President's Report, 1891, pp. 17-18.

number of students taking law without a college degree grows each year less, and the character of the work is distinctly broader and more scholarly.

THE COLLEGE OF PHYSICIANS AND SURGEONS.

Consolidated with Columbia in 1891 and now one of the university faculties, several notable steps in the line of progress have been taken by the medical school. President Low says in his report for 1891:

> The medical school has been importantly strengthened in those directions which make for more thorough teaching and in the laboratories which are to conduct original research, while the multiplied opportunities of a great university are thrown open at once to the students of medicine.

The course of study, which was at that time three years, has now become a four-years' course. The notable features of the extension to four years are "the great increase in clinical instruction available to students in small groups," and the introduction of elective courses in the fourth year.

THE SCHOOL OF MINES.

This is a polytechnic school. It offers the following seven courses of instruction, each of four years' duration: Mining engineering, civil engineering, electrical engineering, metallurgy, geology and paleontology, analytical and applied chemistry, and architecture. There is also a graduate course of two years in sanitary engineering.

It offers, also, university courses for the degrees of master of arts and doctor of philosophy in all the departments to graduates of Columbia or other colleges with equivalent curricula.

THE SCHOOL OF POLITICAL SCIENCE.

"1. The school of political science, established in 1880, embraces courses in constitutional history and constitutional law, history of political theories, political economy and social science, Roman law and comparative jurisprudence, administrative law, international law, and history.

"The faculty aims to give a complete general view of all the subjects of public polity, both internal and external, from the threefold point of view of history, law, and philosophy. The prime aim is, therefore, the development of all the branches of the political sciences. The secondary and practical objects are:

"*a.* To fit young men for all the political branches of the public service.

"*b.* To give an adequate economic and legal training to those who intend to make journalism their profession.

"*c.* To supplement, by courses in public law and comparative jurisprudence, the instruction in private municipal law offered by the faculty of law.

"*d.* To educate teachers of political science."[1]

[1] Columbia College, etc. Historical sketch and present condition. 1893. p. 30.

The courses are arranged in three groups: (1) History and political philosophy; (2) Public law and comparative jurisprudence; (3) Political economy and social science.

The seminarium is an important feature of this school, every stimulus to original work being given. The results of this work have been of gratifying excellence. A series of studies in history, economics, and public law, embodying the best results of this original work, has completed its fourth volume, and has received wide and favorable recognition. The well-known Political Science Quarterly, now in its tenth volume, is the organ of this faculty.

The competition for fellowships shows something of the spirit of the work of this school. The dean's report for 1894 shows 98 applicants for university fellowships in political science, of whom 36 were recommended by the faculty as worthy the appointment. Only 9 were awarded fellowships.

In 1894 a chair of sociology was established by the appointment of Prof. Franklin H. Giddings.

The chief obstacle to the highest efficiency of the work in this school seems to be the large number of law students who take this work as a secondary matter. Of the 226 students enrolled in this school in 1894, 151 were also law students. The majority of the law students are not college graduates. Many of the other students in this school are not college graduates. In fact, of the 226 mentioned above, only 139 were full university students, and of these 40 had only finished the junior year in college.

Fortunately, however, the growth of the percentage of college graduates is clearly perceptible. The school has one of the ablest and best organized faculties in political science in the world.

THE SCHOOL OF PHILOSOPHY.

This school was established in 1890, and is in a sense the realization of the school of letters once planned. It has charge of the university courses in philosophy, psychology, philology, and letters. This somewhat anomalous restriction in scope was probably rendered necessary by the preemptions of other faculties, such as that of political science and of pure science. This logical inconsistency in titles, however, has no evil effect upon the practical work of the school.[1] In 1895 it offered the following courses:

	Number of courses.
1. Philosophy and education	13
2. Pedagogy (Teachers' College)	15
3. Greek	10
4. Latin	9
5. English	13
6. Literature	4

[1] The relations to the Teachers' College have become more intimate with the incorporation of the latter in the university.

	Number of courses.
7. Germanic languages	7
8. Romance languages	11
9. Sanskrit	3
10. Semitic languages	9
11. Iranian languages	5
12. Linguistics	1

THE SCHOOL OF PURE SCIENCE.

The first movement toward the establishment of this school was the creation of a department of biology in 1891. This was partly an outgrowth of the consolidation with the College of Physicians and Surgeons. It served as a connecting link between the medical school and the university, and also developed the policy to provide for advanced scientific study.

The school of pure science was established the next year. It contains the following departments: Mathematics, mechanics, physics, chemistry, mineralogy, astronomy, geology, biology, botany, physiology, anatomy, bacteriology. The number of students attending courses during the first and second years may be summarized as follows:

	1892-93.	1893-94.
Graduates	13	29
Seniors, school of arts	37	29
From school of law	2	.....
From school of philosophy	1	.....
Special students	6	9
Total	59	67

UNIVERSITY PRESS.

"At the close of the academic year 1892-93 the trustees authorized the formation of a corporation to be known as the Columbia University Press, to which they granted the use of that name, subject to revocation, in case of need, at the option of the trustees. This corporation has since been formed, with the president of Columbia College as its president. Its object is to provide for the printing and publication of meritorious works on all subjects, after the manner of the Clarendon Press at Oxford. It has designated Messrs. Macmillan & Co. as its publishing agents. The first book to be brought out, bearing its imprint, very appropriately was Classical Studies in Honour of Henry Drisler. Already, however, the Press has performed another service of great value to the college. A committee was appointed "to consider and report on the desirability and practicability of securing uniformity and cooperation in the publication of college documents (contributions to literature and science), and of the several journals edited by faculties of the college." As a result of the labors of this committee, all the serial studies and contributions from departments

of the college, which hitherto have appeared in all sorts of shapes, will appear henceforth with a certain degree of uniformity in style and caption, so far as that may be possible with contributions covering so wide a range. All of them will have, in common, the effect of a systematic series of studies embodying the researches of the officers and students of our various departments. In this way it is expected that the college will be recognized, more widely than hitherto, as the seat of original work in many subjects, no effort having been made in the past to connect these different series with each other or with the college. It is interesting to observe how generally our professors are at work in this direction. The following journals are issued under the direction of members of the faculties of Columbia College, or in cooperation with members of other colleges:

The School of Mines Quarterly.
The Political Science Quarterly.
Bulletin of the Torrey Botanical Club.
Bulletin of the New York Mathematical Society.
Educational Review. (In cooperation.)
Modern Language Notes. (In cooperation.)
American Journal of Archæology. (In cooperation.)
Psychological Review. (In cooperation.)

"The following serial studies and contributions are issued from the college:

Studies in History, Economics, and Public Law.
Studies from the Analytical and Assay Laboratories of the School of Mines.
Contributions from the Electrical Engineering Department of the School of Mines.
Contributions from the Herbarium of Columbia College.
Contributions from the Mineralogical Department of Columbia College.
Contributions from the Geological Department of Columbia College.
Contributions from the Observatory of Columbia College.
Contributions to Philosophy, Psychology, and Education.
Studies from the Biological Department of Columbia College.
Studies from the Department of Pathology, College of Physicians and Surgeons, Columbia College."[1]

STATISTICS CONCERNING THE UNIVERSITY AS A WHOLE.

The student membership of the university reveals a gratifying growth. It was in—

1891-92	1,573
1892-93	1,641
1893-94	1,805
1894-95	1,943

[1] President's report, 1894, pp. 7-8.

The gain comes from all quarters of the Union, and the gains from a distance are, both absolutely and in percentage, in excess of local gains.

Instructors.

	1892-93.	1893-94.
Professors	51	51
Emeritus professors	6	6
Adjunct professors	17	15
Clinical professors	6	9
Instructors	19	21
Tutors	15	18
Assistants	23	30
Curators	2	2
Lecturers	15	15
Director of laboratories	1	.....
Demonstrators	3	3
Assistant demonstrators	7	7
Clinical lecturers	3	6
Chiefs of clinic	10	10
Clinical assistants	48	61
Honorary assistants	.....	3
	226	[1] 257

[1] 1894-95, 265

It will be noticed that the teaching force has been importantly strengthened as compared with last year.

Students.

	1892-93.	1893-94.	Percentage.	
			1892-93.	1893-94.
Undergraduates	296	271	18.05	15.02
Graduates	497	575	30.30	31.87
Nongraduates	847	958	51.65	53.11
	1,640	1,804	100	100
Collegiate course for women (now superseded by Barnard College)	1	1	.....	.....
	1,641	1,805	.....	.....

Summary by schools.

	1892-93.				1893-94.			
	Number holding degree.	Without degree.	Total.	Percentage of degrees.	Number holding degree.	Without degree.	Total.	Percentage of degrees.
Law	108	166	269	38	111	137	248	45
Medicine	251	403	654	38	305	461	766	40
Mines	61	323	384	16	52	325	377	14
Political science	79	85	164	48	18	10	[1] 28	64
Philosophy	63	57	120	52.5	65	18	83	78
Pure science	2	3	5	40	23	7	30	77
	559	1,037	1,596	.....	.....	.....	.....	.....
Less duplicates	62	190	252	.....	.....	.....	.....	.....
	497	847	1,344	36.9	574	958	1,532	37
Arts	.....	.....	296	.....	1	271	272	.....
College course for women	.....	.....	1	.....	.....	.....	1	.....
Grand total	.....	.....	1,641	.....	.....	.....	1,805	.....

[1] The table for 1893-94 has been made without duplicates for purposes of convenience, but it

The following tables show the gratifying spread of our influence:

Number of colleges represented by graduate students.

Year.	American colleges.	Foreign colleges.
1891-92	87	14
1892-93	105	12
1893-94	118	18
1894-95	136	26

THE NEW SITE AND BUILDINGS.

On January 1, 1895, at a cost of $2,000,000, the college came into possession of a tract of 17 acres on Riverside Heights, between One hundred and sixteenth and One hundred and twentieth streets. President Low says:

> By general consent the new site is unsurpassed in location by that of any university in the world. It is near the Grant monument and the new cathedral of St. John the Divine. Anyone placing a building upon this site, in such a location, may be confident of a memorial at once enduring and useful, and one which will be before the eyes of the people of the United States almost more than any college building in the land.

This gives a fine opportuity for the construction of buildings upon a generous plan.

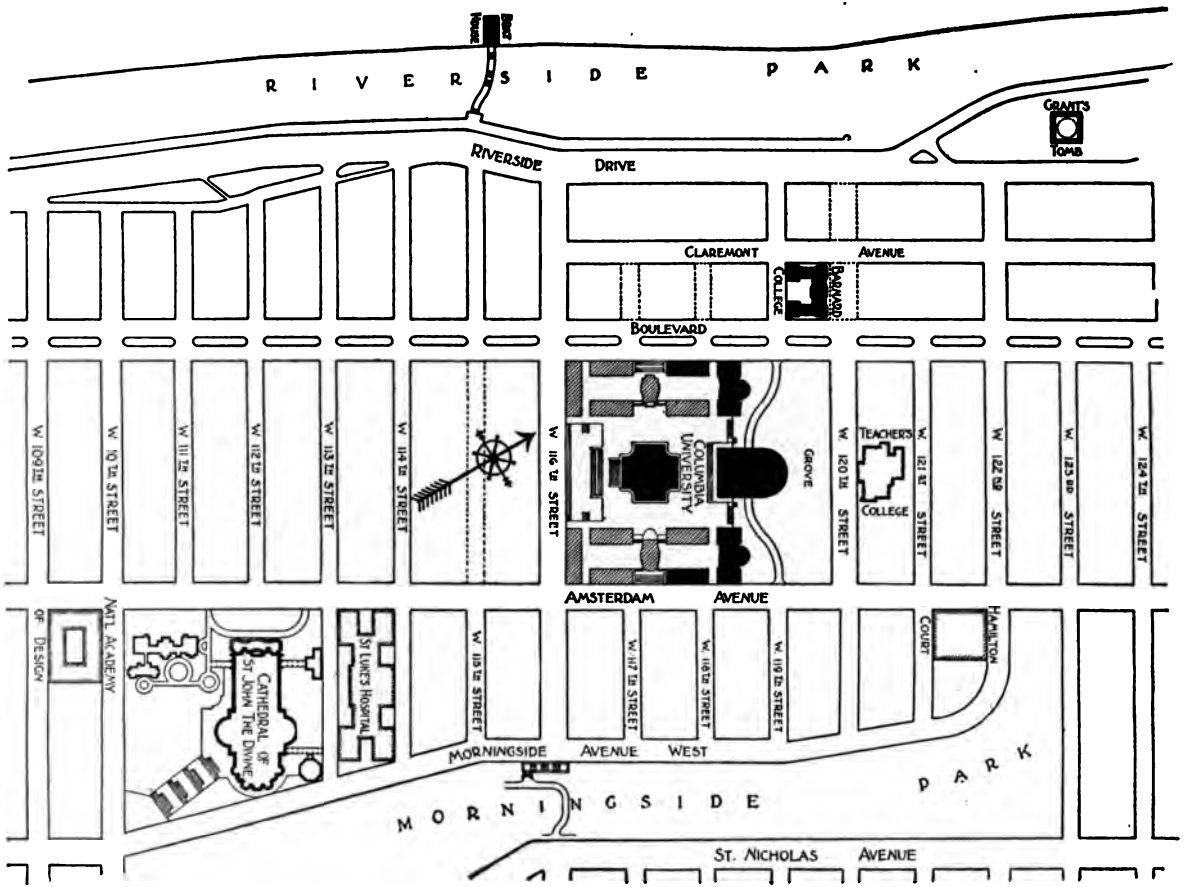
PRESIDENT LOW'S GIFT.

In connection with the removal of the university to the new site, special mention should be made of the munificent gift of President Low. In May, 1895, Mr. Low offered to give to the trustees a sum not exceeding $1,000,000 to retire bonds issued for the building of the new library. The gift was made as a memorial of Mr. Low's father, Abiel Abbott Low, and was conditioned upon the establishment of 36 scholarships and 1 fellowship in Columbia College, Barnard College, and Columbia University, and the release of President Low from the charge of the salary of the professor of sociology. The trustees voted not only to accept the conditions accompanying President Low's gift, but to establish also "The Seth Low professorship of American his-

does not fairly represent in this form the work of the various faculties. The total number of students taught by each faculty is as follows:

	1893-94.	1892-93.
Under faculty of—		
Law	270	269
Medicine	782	654
Mines	379	384
Political science	226	164
Philosophy	165	120
Pure science	67	59

There has been a slight decrease in the School of Arts, due, probably, to causes already noted. The percentage of graduate students is larger than ever. The graduate students number 575, and they form 31.87 per cent of the entire student body.



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COLUMBIA UNIVERSITY—NEW SITE.

tory." This noble liberality was emulated by Mr. William C. Schermerhorn, who at the same time offered to erect a building for natural science, not to exceed in cost $300,000.

COLUMBIA "UNIVERSITY."

President Low, in his report for 1894–95, says:

Inasmuch as King's, afterwards and still Columbia College, has now developed into the university that it aimed from the beginning to become, I think the time has arrived when the entire institution should be known upon our statutes, even if the name of the corporation remain unchanged, either as Columbia University or as the University of Columbia College. By a resolution of the trustees, passed June 1, 1891, I am already authorized to refer to the institution in any publication or announcement as a university.

I shall shortly submit proposed amendments to the statutes intended to give effect to the use of the name university for the institution as a whole, and of Columbia College for the school of arts. I trust these proposals will meet with favorable consideration.

This leads me to consider the university and its policy from another point of view. Whatever may have been the case twenty-five years ago, there is no doubt that to-day, in the United States, there is growing up a tolerably distinct conception of the difference between a college and a university. A college is conceived of as a place for liberal culture; a university as a place for specialization based on liberal culture. In this sense, it is true that Columbia is both a college and a university, and as yet but partially a university.

In the school of law only 47 per cent are college graduates; in the school of medicine barely 36 per cent; and in the school of mines only 13 per cent. It goes without saying that a man need not be a college-bred man in order to be a good lawyer, a good physician, or a good engineer. But it is the general testimony of experience, and the uniform testimony of all the faculities, that the best men, with rare exceptions, are those who have first had the broadening training and the mental discipline of a liberal course.

I conceive, therefore, that it should be Columbia's policy, slowly, if you please, but steadily, to raise the requirements for admission to all her professional schools until a liberal training, equivalent to the old-time college course, is demanded as a condition for admission to every one of them. I hope such a declaration of policy may shortly be made. I think it would give consistency to our own development, and be of service to the cause of higher education throughout the United States.

RELATION OF BARNARD COLLEGE TO COLUMBIA UNIVERSITY.

[From President Low's Report, 1894-95.]

"A matter of great moment, having important consequences, has been discussed by the University Council. The relations of Barnard College to Columbia College as to the first three years of the college course are perfectly distinct. For these years Barnard College provides separate instruction for its young women, almost exclusively by instructors connected with Columbia. As a result of the discussion alluded to, the ultimate relation of Barnard College to Columbia, as to graduate work, is about to be determined by experiment along two different lines. The senior year being merged at Columbia with the first year of university work does not call for separate consideration.

Under the statutes of the trustees, students of Barnard College are at liberty to attend lectures at Columbia in the two faculties of philosophy and political science, the consent of the president and the professor delivering the course being first obtained. Under this provision a considerable number of courses in philosophy and letters have been available to the students of Barnard for several years. No embarrassment or difficulty has arisen from this arrangement in any instance or in any direction. This is one alternative.

"The faculty of political science, on the other hand, has uniformly declined to open any of its courses to Barnard students. The courses in higher mathematics, as being in the faculty of pure science, are also closed to the young women, that faculty having been established since the statute that deals with this question was adopted. Under these circumstances, Barnard College found itself unable to offer to women advanced courses in history, political economy, and mathematics. The students of Barnard can not attend the lectures on these subjects at Columbia, and the professors delivering the lectures declined, for lack of time, to repeat them at Barnard. In the meanwhile Columbia had undertaken to give its degree to the graduates of Barnard College. This is the problem, then, to which the University Council addressed itself. The first proposition was to take the necessary action to throw open to the students of Barnard the desired courses given at Columbia. The University Council declined to adopt this course, and it seemed for the moment as if the whole scheme for the higher education of women in the city of New York for which Barnard College stands, was in danger of shipwreck. Happily the friends of Barnard and of the higher education of women were equal to the emergency, so that what threatened to be a crushing disaster was converted into a distinct advantage to both Barnard and Columbia. Barnard proposed to furnish to Columbia the money for the salaries of three professors, one in history, one in political economy, and one in mathematics, who should divide their time between Columbia and Barnard, provided that professors already connected with Columbia in the same subjects should give as many hours of instruction at Barnard as the professors provided by Barnard should give at Columbia.

"This proposal met with the approval of the university council, and upon their recommendation it has been adopted by the trustees of Columbia and successfully carried into effect. It has one undoubted merit. Barnard thus becomes a source of positive strength to Columbia instead of making new demands upon Columbia's strength. It also provides for the women, separately, advanced courses in history, political economy, and mathematics, for the time being ample in number and in range, by the same professors that teach the men at Columbia. I hope the time will never come when Barnard shall cease to support these professorships. As Barnard College increases in financial strength it is reasonable to hope that the number of profes-

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sorships supported by it at Columbia will be enlarged. Those who are interested in securing for women the same educational advantages that the men enjoy should not be content to ask the old foundations to do double duty; they ought to be glad to prove, in some such way as this, that the old foundations will themselves be strengthened, if they lend themselves to the new work.

"It is thus to be tested by experiment, as the second alternative, whether it will continue to be thought worth while to provide for women, separately from the men, this university instruction in such subjects as history, political economy, and mathematics. As to the college work we are all agreed; the young men and young women are taught separately, and should continue to be so taught. As to the advanced work, however, in the opinion of many the case is different. Oxford, Cambridge, the Scotch Universities, to say nothing of the usual American practice or of the occasional German courtesy, all throw open their university courses to women in common with men. Under such a system it is clear that the addition of three professors to the staff of the university would add just so much to the privileges enjoyed both by the men and by the women. Under the system actually insisted upon by our university council, a system of offsets, Barnard does indeed secure the educational privileges for which it pays; but the men of Columbia lose as many courses from our old professors as they gain from the new, so that the men are better off than they were before only by the greater range that can be covered by the larger number of professors. I doubt whether public sentiment, either ouside of the university or within it, will long consider this separateness of instruction of women in the higher courses worth maintaining at so heavy a cost. However, that is precisely what is to be determined by this experiment."

It has been Mr. Low's good fortune to assume the government of this great college at the time when everything was ready for a sudden and brilliant development. The increasing number of college graduates looking forward to scientific rather than professional careers were ready to welcome new opportunities for training. The growing importance of economic and political studies gave inevitable success to a well-organized attempt to teach these subjects to advanced students. The scholarly study of the law had become a crying need of the time. The feasibility of carrying on in this country original research of the highest character in the various departments of pure science had been demonstrated by the success of the Johns Hopkins University. A more scientific training in medicine, not only for the teacher, but for the practitioner, was becoming a recognized necessity.

The work accomplished in these few years shows that the opportunities have been clearly seen and firmly grasped. Not the least significant feature of the new Columbia is its power of absorption by affiliation. In this way it has knit closely to itself Barnard College

for Women, the Teachers' College, two theological seminaries, the Metropolitan Museum of Art, and the Museum of Natural History. It has also established connection with Cooper Institute by means of lecture courses delivered there by Columbia professors. Its policy is by affiliation with all the greatest agencies of the city's life to become the scientific and scholarly representative of the city and to make itself a vital power in shaping the development of the city. If rightly appreciated by the people of New York and wisely guided in its future course, Columbia, it can be safely prophesied, is only entering upon the long period of its greatness.[1]

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[1] The President's Annual Report for 1897 gives valuable information, statistical in part, about the growth of the university during his presidency.

Schermerhorn Hall. Physics building. Havemeyer Hall. Engineering building.

VIEW FROM BARNARD COLLEGE, APRIL 15, 1897.

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3. UNION COLLEGE, 1795.

[By Robert C. Alexander.]

Union University, Andrew V. V. Raymond, D. D., LL. D., president—Union College; Albany Law School; Albany Medical College; Albany College of Pharmacy.

The history of Union College is, in its origin and during its early years, a narrative of toil, sacrifice, faith, constancy, indomitable energy, and ultimate success. Long before its incorporation the struggle began. As early as 1779 petitions were circulated, addressed to the governor and legislature, in response to which a charter was drawn, but for some reason never signed or sealed. It recited that—

Whereas a great number of respectable inhabitants of the counties of Albany, Tryon (Montgomery), and Charlotte (Washington), taking into consideration the great benefit of a good education, the disadvantages they labor under for want of means of acquiring it, and the loud call there now is, and no doubt will be in a future day, for men of learning to fill the several offices of church and state, and looking upon the town of Schenectady in every respect the most suitable and commodious seat for a seminary of learning in this State, or perhaps in America, have presented their humble petition to the governor and legislature of this State, earnestly requesting that a number of gentlemen may be incorporated in a body politic, who shall be empowered to erect a college in the place aforesaid, to hold sufficient funds for its support, to make proper laws for its government, and to confer degrees.

This institution was to have been called Clinton College, in honor of New York's great governor. It contemplated the creation of a corporate body by an executive act, therein following the colonial precedents. Seven years later the board of regents was created, and upon that board thereafter devolved the chartering of New York colleges. The petition of the "respectable inhabitants" seems to have been favorably received, but the exigencies of the war probably diverted attention from the project, and the unsealed charter in the State Library at Albany contains all that is known to-day of Clinton College.

But the widespread belief that there should be a college in Schenectady was too deep rooted to be readily abandoned. Dominie Dirck Romeyn, pastor of the Reformed Dutch Church in Schenectady, who more than any other man is entitled to be styled the founder of Union College, was unremitting in his efforts to secure the charter, as is evident from his letters during the period 1779–1795.

Again, in 1779, as appears from the assembly journal of that year, "a petition was received from John Cuyler and 542 inhabitants of Albany and Tryon counties, and from Thomas Clarke and 131 others of Charlotte County, for a college at Schenectady." No action seems to have been taken on the petition, possibly because the inhabitants were not so "respectable" as the petitioners for Clinton College charter.

An interesting recital is that which follows, contained in the memorial of 1795 to the board of regents:

In the year 1782 the citizens of the northern and western parts of this State, together with the inhabitants of the town of Schenectady, amounting to near 1,200 subscribers, applied to the legislature, in session in the town of Kingston, for the institution of a college in the town of Schenectady, for founding which the citizens of Schenectady alone proposed an estate valued at nearly eight thousand pounds principal.

That is all that history tells us of the application of 1782, but in the light of those thrilling times how eloquent it is of the spirit which animated the Revolutionary patriots! The war was not yet closed. The smoke was still rising from the smoldering ruins of burned habitations on the northern and western borders, and the echo of the Indian war whoop had not yet died away in the valley of the Mohawk. The long struggle for liberty had left the people decimated, weary,

and impoverished. Yet 1,200 of the citizens on the northern and western frontier subscribed from their meager fortunes to the cause of higher learning, and the citizens of Schenectady alone proposed to contribute to the new college a sum of £8,000. The extent of this sacrifice is apparent when it is remembered that by the State census fourteen years later the whole population of the town was but 3,472, "of whom 683 are electors and 381 slaves." Yet this second application, even with so much of heroic self-sacrifice behind it, fared no better than Clinton College.

In February, 1785, measures were taken for the establishment of a private academy in Schenectady, by mutual agreement among leading citizens, and it was placed in the charge of 12 trustees. An academy building was erected a few years later on the northwest corner of what are now Union and Ferry streets. It was of brick, two stories high, about 50 by 30 feet on the ground plan, and cost about $3,000. It afterwards became Union College, and was its only edifice until 1804. The school was opened under the care of Col. John Taylor, of New Jersey, and appears to have been conducted with much ability, being well sustained by the community in which it was planted. This academy was the germ of Union College.

In December, 1791, the managers of the academy in Schenectady memorialized the legislature for a grant of land in the Oneida Reservation to their institution, "in order to be in possession of an estate that would enable them at an early day to apply to the regents for incorporation as a college, and to have an amount of property that would justify the establishment of a college." The assembly records show that the committee reported it to be "derogatory to the interest of the State to grant the request."

In February, 1792, the trustees of the academy sent another petition to the regents, in which they stated that they had at that time about 80 students in the English language, and that they had nearly 20 pursuing the study of the learned languages and higher branches, in preparation for the first or more advanced classes in college. They were fully convinced of their ability to establish and maintain a college, and had made efforts that led them to confidently depend upon raising the fund needed for endowment, and asked for a college charter. As a foundation for their fund, the town of Schenectady was willing to convey to the trustees of a college as soon as they were appointed, and by good and ample title, a tract of land containing 5,000 acres. A pledge of 700 acres more was offered from individuals, and a further subscription of near £1,000 in money, to be paid in four installments, was promised from citizens. The consistory of the Dutch Church offered to give a building called the "Academy" for college use, and not to be alienated, estimated as worth £1,500, and a sum of money collected for a library, amounting to £250, was likewise to be given.

But as these funds could not be realized or applied unless there was created a board of trustees capable of holding them, they prayed for an act of incorporation from the regents, with all the powers and privileges conferred by law upon Columbia College, and that the name of the institution should be "The College of Schenectady."

The regents, on the 27th of March, denied this application, upon the ground that sufficient funds had not been provided.

Failing in this effort, an application was made in November of the same year for the incorporation of the private institution as the "Academy of the Town of Schenectady." This application was successful, and an academic charter was granted in January, 1793.

Early in 1794 the regents were again petitioned for a college charter for the academy, but this was denied upon the ground that the state of literature in the academy did not appear to be far enough advanced nor its funds sufficient to warrant its erection into a college.

On December 18, 1794, was presented the final and successful petition to the board of regents. It thus begins:

> We, the subscribers, inhabitants of the northern and western counties of the State of New York, taking into view the growing population of these counties, and sensible of the necessity and importance of facilitating the means of acquiring useful knowledge, make known that we are minded to establish a college upon the following principles:
>
> 1st. A college shall be founded in the town of Schenectady, county of Albany and State of New York, to be called and known by the name of Union College.
>
> 2d. The said college shall be under the direction and government of twenty-four trustees, the majority of which trustees shall not at any time be composed of persons of the same religious sect or denomination.

These two provisions mark a new era in college erection. Of the colleges which antedated Union, we find Harvard, Yale, Dartmouth, and Williams were distinctively Congregational; William and Mary, St. John's, and Columbia, Episcopal; Brown, Baptist; Princeton and Hampden-Sidney, Presbyterian; Rutgers, Reformed; and Dickinson, Methodist. Union was the first strictly nonsectarian college in the country. The name itself was given as expressing the intention of uniting all religious sects in a common interest and for the common good by offering equal advantages to all, with preference to none. It was designed to found an institution upon the broad basis of Christian unity, and this idea has ever since been faithfully followed in the spirit of the original intention, no particular religious denomination having at any time claimed or attempted to control its management or to influence the choice of trustees or faculty. Its motto, "In necessariis unitas, in dubiis libertas, in omnibus caritas," has been characteristic of the perfect harmony and genuine catholicity which has marked its entire history.

At last success crowned the efforts of the "citizens," and on February 25, 1795, a charter was granted to Union College, naming twenty-four trustees, giving full power for granting degrees, and the most

ample guarantees against denominational control. The chronicles of the day record that the news of the granting of the charter, when it reached Schenectady, was celebrated by great rejoicing, with the ringing of bells, firing of cannon, display of flags, bonfires, and a general illumination.

Next to Dominie Romeyn, to Gen. Philip Schuyler belongs the honor of establishing the college at Schenectady. The city of Albany had offered strong pecuniary inducements for making the capital the site of the college, but the vigorous efforts of General Schuyler so reenforced the Schenectady petition that it secured the young institution for that town. The following letter from General Schuyler to Dr. Romeyn, announcing the signature of the charter, evinces the hearty interest he felt in the new college:

ALBANY, *March 2, 1795.*

REVEREND AND DEAR SIR: On Wednesday last the engrossed Charter was submitted to the Regents and approved of, and on Friday the seal of the University was affixed thereto with the Chancellor's signature, an event the more satisfactory to me, as I have long since wished to see the vicinity of my native place honored with such an Institution, and I sincerely congratulate my fellow-citizens of Schenectady in particular, and the whole of the Northern and Western parts of the State in general, on the facility with which they will be able to obtain a collegiate education for their children. May indulgent Heaven protect and cherish an Institution calculated to promote virtue and the weal of the people. Please to request the gentlemen to whom has been confided the subscription paper to the funds of the College, to add my name to the list for one hundred pounds. I shall strive to procure a donation on the part of this State, and as I have already conversed with some leading members on the subject, I trust my efforts will be successful. The charter, with all the evidences of the funds, are, by order of the Regents, to be delivered to one of the trustees of the College. If Chief Justice Yates does not come down, they will be delivered to one of the gentlemen here, to be delivered to him as the first trustee named in the act of incorporation.

I am with great regard, Reverend Sir, Your most obedient servant,

PH. SCHUYLER.

The Rev. Dr. ROMEYN.

A subsequent act, April 6, 1795, authorized the trustees of the academy to convey, and those of the college to accept, the academy building on Union and Ferry streets, and this was accordingly done.

The college was organized on the 19th of October, 1795, by the election of the Rev. John Blair Smith, D. D., of Philadelphia, as president; John Taylor, A. M., as professor of mathematics and natural philosophy, and the Rev. Andrew Yates, as professor of the Latin and Greek languages. The first commencement was held in May, 1797, in the old Reformed Dutch Church, and the first degrees conferred upon three young men who had finished the course of study then required. This was an occasion of signal and novel interest to all the country around, and drew together a large and enthusiastic audience. These three graduates were, Cornelius D. Schermerhorn, of Greenbush; Joseph Sweetman, of Charlton; and John L. Zabriskie, of Schenectady.

The two latter were both living at the semicentennial of the college in 1845, and Rev. Dr. Sweetman delivered the anniversary address on that interesting occasion.

A manuscript report of the board of regents to the legislature, March 6, 1797, signed by Chancellor John Jay, and now in the Union College library, shows the progress made by the new college during its first two years. An extract is appended:

UNION COLLEGE.

From the Report of a Committee of the Trustees it appears that the Property of the College consists in various articles to the following amount, namely:

	Drs.	Cts.
Bonds and Mortgages produsing an annual Interest of 7 per cent	21301	
Subscriptions and other Debts due on the Books of the Treasurer	4983	10
Cash appropriated for the purchase of Books	1356	45
House & Lot for the President	3500	
Lot for the Scite of the College	3250	
House & Lot heretofore occupied for the Academy—a donation from the Consistory of the Dutch Church	5000	
Books &c. in the possession of the Trustees and on the way from Europe	2381	99
Cash appropriated by the Regents for the purchase of Books in the hands of the Committee	400	
Legacy by Abraham Yates Junr. Esq., of Albany	250	
	42422	60

and 160 acres of land. The Faculty of the College at present consists of the President and one Tutor, and the salary of the former, with an House for his Family is 1100 Dollars; and of the latter 665 Dollars per Annum, with an additional allowance at present of 250 Dollars on account of the extraordinary price of the necessaries of life. There are thirty seven Students, eight in the Class of Languages, twenty in the Class of History and Belles Lettres, six in the Class of Mathematics, and three in the Class of Philosophy—The Course of Studies, is the first year, Virgil, Cicero's Orations, Greek Testament, Lucian, Roman Antiquities, Arithmetic, and English Grammar; the second year, Geography and the use of the Globes, Roman History, History of America and the American Revolution, Xenophon, Horace, Criticism, and Eloquence; the third year, the Various Branches of Mathematics, and Vulgar and decimal Fractions, and the Extraction of the Roots, Geometry, Algebra, Trigonometry, navigation, mensuration, Xenophon, continued, and Homer; and the fourth and last year, Natural Philosophy, the Constitution of the United States and of the different States, Metaphysics, or at least that part which treats of the Philosophy of the Human mind, Horace continued, and Longinus, and during the Course of these Studies the attention of the Classes is particularly required to Elocution, and to Composition in the English Language,—A provision is also made for substituting the Knowledge of the French Language instead of the Greek, in certain cases, if the Funds should hereafter admit of instituting a French professorship; [the first optional course] all which, together with the System of Discipline, is contained in a printed Copy of the Laws and Regulations for the Government of the College, and which accompanies this Report.

The Trustees farther report that the officers of the College discharge their duty with ability, diligence and fidelity and that the Students generally have exhibited specimens of their progress in Science at the Examinations, which are public and stated three times a year; and finally that it would essentially promote the interest of that part of the Country if the Legislature would patronise with further donations this infant Seminary; the want of means to endow professorships obliges the

present officers to attend to too many branches of Science; insomuch so that the President has during the present year instructed the Classes of History, Chronology, Antiquities, Geography, Natural and Moral Philosophy, Criticism, Logic, Constitutions of the United States and of the different States, and Languages.

President Smith resigned in 1799, and was succeeded by Rev. Dr. Jonathan Edwards, the younger, who died in office in August, 1801. His successor was Rev. Dr. Jonathan Maxcy, who resigned in 1804.

Although the college was still feeble, it was not without enterprise. Under the presidency of Dr. Edwards, in 1798, a new edifice was begun on a scale magnificent for that day. This building was afterwards known as the "West College," located on the corner of Union and College streets, and was finished in 1804. It was in the Italian style of architecture and from the designs of Philip Hooker, then an eminent architect of Albany. It was of stone, three stories high, besides a high basement, and was surmounted by a central cupola. The ground plan measured 150 by 60 feet, and the original cost was about $56,000, besides $4,000 for the site. It contained a residence for the president, the chapel, library, and recitation rooms, and a considerable number of dormitories. In 1815 it was sold to the city and county for a court-house, jail, and city offices, and while thus owned it was commonly known as the "City Hall." The college received in payment 3,000 acres of land in detached parcels in various parts of Schenectady County. In 1831 it was repurchased by the college for $10,000, and used for the library, cabinets, and residence of freshman and sophomore classes until 1854. It was then resold to the city for the sum of $6,000, and was used by the city as a union school until the year 1890, when it was demolished to make room for a more modern school building. Between 1805 and 1810 a row of two-story brick buildings was erected on College street for use as dormitories. It was known as the "Long College," and was sold about 1830.

An event occurred in 1804 which proved to be of peculiar and lasting advantage to the institution, and from which its success may be justly dated. This event was the choice of the Rev. Eliphalet Nott, as president. Mr. Nott was then a young clergyman of Albany, known at the time as the eulogist of Hamilton, as an eloquent and effective public speaker, of dignified and courteous manners and distinguished learning, but not as yet known for that talent in the education of young men which this election gave him the opportunity to exercise, and which has never been surpassed in the history of any American college. Endowed by nature with a keen perception of character, a discriminating judgment in developing latent talent, a dignity of manner commanding both love and respect, a facility in governing young men, wherein the secret lay in teaching them to govern themselves, and a zeal and earnestness in the discharge of every duty, he acquired and held through a long and active life a commanding position as an educator throughout the country.

THE LOTTERY.

The financial history of Union College from this period until 1853 forms a chapter by itself—a chapter which the moralists of these latter days would cheerfully pass over unnoticed, but the fact remains and must be admitted that Union College was placed on a secure financial foundation by a tremendous gambling device, which, if applied to-day, would not only place Dr. Nott and his reverend coadjutors under the frown of public sentiment and the ban of church discipline, but would have landed them inside the bars of a State prison. We are more enlightened and conscientious than our grandfathers. The church fair of to-day was the lottery of the early part of the century. The lottery was the most beneficent institution of that day. Not only was it permitted, but it was especially authorized by law as a proper and legitimate method of raising money. It was regarded as perfectly innocent and unobjectionable, and was not only tolerated, but sustained and encouraged by the whole Christian community. Lotteries were employed to secure funds for charities, for schools, for hospitals, for colleges, and for churches. It must not be thought strange, therefore, that a Christian minister like Dr. Nott, following the fashion of the day, invoked the aid of the popular device and became the successful manager of the hugest lottery deal ever authorized by the State of New York.

When the new president assumed his office the finances of the college were in a nearly desperate condition. During the administrations of his three predecessors there had been a constant lack of funds to meet the regular current expenses of the college. The failure of Dr. Smith's expectations in this respect was one of the causes of his early retirement. Dr. Edwards died, after a short incumbency, weighed down with concern as to the fate of the institution placed under his charge. Dr. Maxcy was not more fortunate than his predecessors, and his short administration was a continuous struggle with financial embarrassment, from which extrication appeared hopeless. Less than $35,000 had been obtained from individual subscriptions, and some of these were still unpaid. The State had at various times granted, in money or in lands afterwards sold, property which availed $78,112.13. The new building (West College) was still incomplete and the college was badly in debt.

At this juncture the young Albany clergyman assumed the presidency. He at once applied to the State for aid, and in March, 1805, it came in the shape of the grant of the proceeds of four lotteries of $20,000 each. The returns, however, were slow, and in 1806 the legislature borrowed $15,000 on the credit of the State and loaned it to the college, to be repaid from the proceeds of the lotteries. In 1814, when the lotteries were wound up, the college had realized from them about $76,000, which was applied toward furnishing the equipment,

edifices, and instruction necessary for the rapidly increasing number of students.

A few years' experience showed that the location in the city was not sufficiently ample, and the observing eye of Dr. Nott, at an early period in his presidency, had noticed in the suburbs a better one that combined in a rare degree every advantage desirable. On the eastern border of the city the fields rose by a gentle slope to a plain of moderate elevation and of easy access. Near the upper edge of this slope the construction of a terrace a few feet high would afford a level campus of ample space and a site for buildings that would overlook the valley, the river, and the neighboring city, while northward glimpses of mountains blue from distance, and southwestward ranges of hills dividing the waters of the Mohawk and Susquehanna rivers would present a panorama of peculiar loveliness. A gently murmuring brook issuing from dense woodlands flowed across the grounds just north of the proposed site, and in the rear alternating fields and groves extended several miles eastward to the Hudson.

A half century later, in an address before the gathered alumni of Union who had met to celebrate the anniversary of his accession to the presidency, Dr. Nott thus spoke of the new college grounds:

> Fifty years ago, having been charged with the supervision of Union College, I stood for the first time on yon rising grounds where the college edifices now stand. The same range of western hills, the same intervening luxuriant flats, and the same quiet river winding through fields of grain whitening for the harvest then met the eye; the same starry firmament overspread the night, and the same glorious sunlight rendered visible by day, in its general outline, the whole lovely valley of the Mohawk.
>
> The immediate college grounds, however, now so symmetrical and ornate, were then mere pasture grounds, scarred by deep ravines, rendered at once unsightly and difficult of access by an alternation of swamp and sand hill, and the whole divided into numerous irregular compartments in evidence of different ownerships. As yet neither shrub nor tree had been planted, walk traced, garden laid out, or edifice erected thereon.

A tract of some 250 acres was secured mainly on the responsibility of the president, and new buildings begun upon plans drawn by M. Joseph Jacques Ramée, a French engineer then eminent in this country and for a time employed by the National Government in planning fortifications and public works.

In 1890, in an old print shop in Paris, a Union College graduate of the class of 1880 discovered M. Ramée's original sketch of the ground plan of the college buildings and gardens. It bears the inscription, "College de l'Union à Schenectady, État de New Yorck, 1813," and is probably the original draft submitted by the architect to Dr. Nott. This plan has been very closely followed in the laying out of the grounds and the erection of the successive college buildings. It shows the ground plan of the main college buildings, north and south, the central circular building, not completed till 1876, and the projected semicircular building in the rear, which has still more recently

taken form in the Powers Memorial Building, finished in 1884. The two buildings at the ends of this semicircle, however, are still to be built. Nor has the lake in the "college pasture" or the Catholic cross in the garden shown on the Frenchman's plan yet materialized into being. The work of construction was begun in 1812, and the two main buildings finished in 1820, although one of them was occupied as early as 1814. These buildings were four stories high, 200 feet by 40 feet each, and cost about $110,000.

To meet this expense application was again made to the legislature in 1814. Dr. Nott was a power in Albany. His influence with legislators and before committees was another instance of that remarkable personal force which impressed itself upon all he met. Other colleges and institutions were before the legislature of 1814 as applicants for aid, but, satisfied that their unaided efforts would prove ineffectual, intrusted their cases to President Nott, who generously advocated their claims in the same breath with his own, and the benefits to Hamilton College, the College of Physicians and Surgeons, and the Asbury African Church in New York were included in the same grant as those to Union. Columbia College had introduced a bill intended to grant to that institution the celebrated Hosack Botanical Garden in New York. Convinced of the futility of their independent claim for aid, the Columbia managers withdrew their special bill and besought Dr. Nott to take up their appeal. This he did so generously and vigorously that the Columbia grant was attached as a "rider" to his own lottery bill, and went through with it. Thus, solely through the influence of the president of Union, Columbia received that magnificent property which to-day forms its principal endowment. The botanical garden granted to Columbia comprised 20 acres located between Fifth and Sixth avenues, Forty-seventh and Fifty-first streets, in New York City, then 3½ miles out of town, but now the center of the wealth and population of the metropolis. In the same act which gave to Columbia the title to the botanical garden, it was provided, in recognition of the services of her sister college, that within one year from the passage of the act, at least one healthy exotic flower, shrub, or plant of each kind it contained in duplicate should be sent, with the jar containing it, to Union College. There is no record, however, that Columbia ever complied with this graceful suggestion for the recognition of Union's services in her behalf.

So marked was the influence of the distinguished clerical lobbyist in favor of the combination bill that at the close of the act in the official session laws of 1814 was printed this unprecedented note:

> No bill before the legislature excited greater interest and attention than this act. Much credit is due to the unwearied exertions of the able and eloquent president of Union College in promoting its passage.

This lottery bill granted to Union College $200,000, to Hamilton College $40,000, to the College of Physicians and Surgeons $30,000,

and to the Asbury African Church in New York $4,000, with interest for six years.

But the managers of these lotteries, appointed by the act, were so remiss in selling the tickets that up to 1822 not a dollar of the principal had been paid to any of the beneficiaries.

Again, therefore, the good doctor betook himself to Albany, and on April 5, 1822, an act was passed "to limit the continuance of lotteries." It recited the delay in the conduct of the concern, and authorized the institutions themselves to take the management of the lotteries, direct the drawings, receive the avails, and pay the prizes. The other beneficiary institutions, having witnessed the failure of the lotteries during the preceding eight years, took alarm at the responsibility this act devolved upon them, and refused to participate in the active management. Not so the president of Union. With the consent of his board of trustees, he bought out, for a satisfactory consideration, the interests of all the other institutions, for which he borrowed, on his own responsibility, $75,000, and assumed in his own person the entire management of this great hazard. It was this bold act and the transactions which followed it, which years later brought Union College into the courts and into legislative investigations, and which caused the motives and acts of the president to be sharply arraigned.

From this consolidated lottery Union College received in all a sum of $277,000. Dr. Nott had sublet to Yates & McIntyre, a firm of brokers, the management of the lotteries, reserving to himself a percentage of the profits from such management, which were afterwards found to amount to $71,691.29. In order to save the firm of Yates & McIntyre from bankruptcy and from imperiling the college interests in the proceeds of the lottery, Dr. Nott had advanced the firm large sums of money by pledging his and his wife's property, and had taken as security a bond for $150,000. It was the ownership of these two sums which years later gave rise to the charges against the president. His enemies claimed that these profits and the bonds belonged to the college and not to the doctor personally. This claim was, however, never made by the college, but by newspapers and by outsiders. The charges were never credited by the friends of Dr. Nott, or by the college trustees. And the president had frequently announced his intention ultimately to appropriate every dollar that he derived as profits from the lottery transaction to the benefit of Union College, a promise which was eventually more than fulfilled.

In 1849 a resolution was introduced in the assembly requiring a report as to the financial condition of Union College. This was incited by the reports of newspapers hostile to Dr. Nott, charging that he had appropriated to his own use $560,000 of the funds of the college. A committee of the assembly made an examination of the books and reported that the "financial condition of the college was unsound and improper." This led, of course, to a thorough investi-

gation, in which Hon. John C. Spencer, an old pupil of Dr. Nott, volunteered his services in behalf of his old instructor, and his masterly argument before the commission was so eloquent and convincing as to complete the vindication of his venerable instructor of other years, and to remove the odium from an honored name. Dr. Nott completed the discomfiture of his enemies by anticipating the report of the legislative committee and by executing a deed of trust which bestowed upon the college a property then estimated at over $600,000, an act which only the most malignant of his enemies persisted in characterizing as the discharge of a debt, and not as a donation. Certainly the college owes its high position among American colleges not only to the scholarship and the reputation of Eliphalet Nott, but also to his shrewdness, skill, and munificence it owes its largest endowment.

The tracing to their culmination of the lotteries and the difficulties engendered by them has caused a digression from the history of the college itself and its progress through these years. Notwithstanding the number and the intricacy of the outside matters which claimed his attention, Dr. Nott's first interests were in "his children," as his pupils were affectionately styled. From the time of the erection of the new college buildings on the hill the number of students steadily increased until in 1820 the number in all the classes exceeded 300, and the graduating class alone contained 65. In this class were several men who attained distinguished eminence, among whom were William H. Seward; Laurens P. Hickok, who long stood at the head of American metaphysicians; William Kent, one of New York's ablest jurists; Tayler Lewis, the greatest linguist and classical scholar of his age, and Rev. Dr. Horatio Foote. In 1825 Union had passed Harvard and Yale in the number of its students, and with the exception of a few intervening years held for a quarter century the honor of being the largest college in the United States. The fame of Dr. Nott as an educator, the high reputation of the college, the excellence of its system and management drew students from all parts of the country to Schenectady, and large numbers came from the lower classes of other institutions to obtain the benefit of President Nott's senior lectures and receive from his hand their diplomas. The president drew around him and kept as his coadjutors a remarkable body of faithful, energetic, and learned professors, and throughout President Nott's unprecedented administration of sixty-two years the college enjoyed the highest degree of prosperity.

In 1845 was celebrated with great enthusiasm the semicentennial anniversary of the founding of the college, for which preparations had been made for two years previous. The occasion was one of general rejoicing and congratulation. Addresses were made by Rev. Dr. Joseph Sweetman, one of the first graduates, and by Dr. Alonzo

Potter, afterwards vice-president of the college. Over 500 of the alumni attended the anniversary.

Another interesting anniversary was held nine years later on the completion of the half century of Dr. Nott's administration, July 25, 1854. The central point of interest on this occasion was the address of the venerable president, which was a compact review of the labors, trials, and successes of the fifty years which had closed. The other principal orators were Hon. William W. Campbell, of Cherry Valley, and President Francis Wayland, of Brown University, a former pupil of Dr. Nott. The proceedings upon both these anniversary occasions were preserved in the form of printed memorial pamphlets.

Before this time, however, the aged president had begun to feel the infirmities of advancing years, and in 1852 Dr. L. P. Hickok was elected vice-president, and upon him gradually devolved the cares of administration, although the presidency was not actually conferred upon him until the death of Dr. Nott in 1866.

The prosperity of the college continued undiminished until the civil war burst like a storm cloud over the country. The classes of 1860 and 1861 were among the largest in the history of the college. Through nearly a quarter century the South had sent more students to Union College than to any other, and the class rolls of those years show representatives from nearly every Southern State. But as the controversy over the question of slavery became more bitter the South gradually withdrew its young men from Northern institutions, and when the first shell broke over Sumter the last band of Southern students then remaining in Union left to join the ranks of the Confederacy. Nor was this the only cause of depletion. Scores of Northern students forsook their books to take up the musket. The college campus became a drill ground. The brilliant young professor of modern languages, Prof. Elias Peissner, recruited a company on the campus and led them in person to the front, himself falling on the bloody field of Chancellorsville with a colonel's eagles on his shoulders. Over 300 Union men became Union soldiers.

The war was the beginning of a period of depression which lasted for many years. Dr. Nott died in 1866, at the ripe age of 93 years, and was succeeded by Dr. Hickok. He resigned in 1868, and was succeeded by Rev. Dr. Charles A. Aiken, of Princeton, who served for only two years. After a brief interregnum, Rev. Dr. Eliphalet Nott Potter, a son of Bishop Alonzo Potter, and a grandson of President Nott, was elected to the presidency. Under his administration new endowments were received, new buildings erected, and the number of students increased. Under his management, however, misunderstandings arose between the president and the faculty and trustees, and he retired in 1884. On his retirement, Hon. Judson S. Landon became president ad interim until the election, in 1888, of Harrison E. Webster, LL. D.

EDUCATIONAL INFLUENCE AND PROGRESS.

There is perhaps no place more fitting than this for a brief mention of the services of the instructors who made Union famous and of her influence in the development of higher education in America. It is true that during the administration of Dr. Nott he alone shaped the policy of the college, originated plans for its government, suggested and carried into effect changes when needed, and controlled its affairs as absolutely as any monarch who ever ruled an empire. Yet his rule was gentle, if autocratic. The utmost harmony prevailed in the councils of the faculty, and the mention of their names is sufficient to account for the value and popularity of the Union College course during his administration of sixty-two years. At the head of the Greek department, Union has had such instructors as Andrew Yates, Henry Davis, Robert Proudfit, Tayler Lewis, and Henry Whitehorne. In Latin, Thomas C. Reed, John Newman, Benjamin Stanton, and Robert Lowell. In mathematics, John Taylor, Benjamin Allen, Francis Wayland, Isaac W. Jackson, and Isaiah B. Price. In chemistry, Joel B. Nott, Charles A. Joy, Benjamin F. Joslin, Charles F. Chandler, and Maurice Perkins. In natural philosophy, Thomas Macauley, Alonzo Potter, and John Foster. In French and German, Pierre Reynaud, Louis Tellkampf, Pierre A. Proal, Elias Peissner, William Wells, and Wendell Lamoroux. In natural history, Jonathan Pearson and Harrison E. Webster. In rhetoric, logic, and belles-lettres, Thomas C. Brownell, Alonzo Potter, Laurens P. Hickok, Nathaniel G. Clarke, Ransom B. Welch, and George Alexander. In Oriental literature, John Austin Yates and Tayler Lewis. In civil engineering, Frederick R. Hassler, William M. Gillespie, Cady Staley, and Winfield S. Chaplin.

Union College was the first to break away from the strict and beaten classical course and to place scientific instruction on a plane of equal dignity with it. At Union also originated the so-called optional system, which it has always exercised to a limited degree, but never to the extent of the license which it afterwards attained in other colleges. As far back as 1797 we have seen, in the report of the regents, quoted in the foregoing pages, the germ of this now popular system. "A provision is also made for substituting the knowledge of the French language instead of the Greek, in certain cases, if the funds should hereafter admit of instituting a French professorship." This professorship, with a single exception, the first in the United States, was established in 1806.

The essential features of the scientific course, as originated by Dr. Nott and so ably advocated by President Wayland and other of his pupils, was the substitution of the modern languages and an increased amount of mathematical and physical science in place of the Greek and Latin languages. It also permitted, within certain well-defined limits, the election of certain studies by the student.

The first course of civil engineering in any American college was established at Union in 1845 by Prof. William M. Gillespie, and has ever since been successfully maintained. While it still maintains the classical course in all its thoroughness, the scientific instruction has recently been still further developed by the establishment of courses in sanitary and electrical engineering. The departments of English and of modern languages have also been greatly strengthened, and the course of instruction at Union to-day compares favorably with that of the best New England and New York colleges.

Union has been called the mother of secret societies. Instead of antagonizing and repressing the fraternities, the authorities at Union have ever encouraged and fostered them. The three oldest college fraternities in the United States, except the venerable Phi Beta Kappa, which had then already ceased to be a secret society, were organized at Union in 1825 and 1827. These were Kappa Alpha, Sigma Phi, and Delta Phi. Later on, in 1832 and 1847, Psi Upsilon, Chi Psi, and Theta Delta Chi established their first chapters at Union. The authorities have always maintained that, properly conducted, the fraternities were of actual benefit rather than a hindrance to college discipline. The fraternities now flourishing are, in the order of their establishment, Kappa Alpha, Sigma Phi, Delta Phi, Psi Upsilon, Delta Upsilon, Apha Delta Phi, Beta Theta Pi, Phi Delta Theta, and Chi Psi, reestablished in 1892. The Union chapter of Phi Beta Kappa, established in 1817, is the Alpha or parent chapter for the State of New York. Another honorary fraternity, Sigma Xi, has recently been established, to which only the honor men of the scientific and engineering courses are eligible, Phi Beta Kappa being confined to the classical students.

Two literary societies, the Philomathean and the Adelphic, each nearly a century old, divide the allegiance of the students. Each has a fine hall and well-selected libraries of from 3,000 to 5,000 volumes.

One of the earliest of all college publications was the Floriad, published by the literary societies of Union in 1809. A few numbers of this paper are in the Boston Public Library. The various student publications which have followed it and survived for a longer or shorter period were the Students' Album (1827), The Parthenon and Academicians' Magazine (1832), The Union College Magazine (1860–1875), The Unionian (1862), The Spectator (1873), and the Concordiensis (1877). The last-mentioned is now the principal college publication, and has recently been made a bimonthly. The Garnet, so named from the college color, is an annual illustrated publication, conducted by the secret societies.

The songs of Union form a handsome volume, Carmina Concordia, first collected by a member of the class of 1875, a new edition of which, embodying the recent songs, has since been issued by two members of

the class of 1896. John Howard Payne was one of Union's earliest song writers, and gifted writers have from year to year added to the collection. A few of these songs are perennial in their fragrance and are always sung on festive occasions. This is especially true of the "Song to Old Union," composed by Fitzhugh Ludlow, of the class of 1856, and now deceased. It is always sung on commencement day, at the close of the graduating exercises. The hearty good will and feeling with which returning sons join in the grand chorus—

> Then here's to thee, the brave and free
> Old Union, smiling o'er us;
> And for many a day, as thy walls grow gray,
> May they ring with thy children's chorus—

show that the gifted poet did not attune his lyre in vain.

The government of Union College has always been paternal, but characterized by the greatest freedom consistent with good results. The ponderous code of rules and restrictions of the old days has long since gone out of print, and the only rule now promulgated at Union College is that recently announced in the terse language of ex-President Webster, that "every student should do his work and conduct himself like a gentleman." On these two hang all the law and the prophets.

Of the nine presidents of Union, four, Presidents Hickok, Potter, Webster, and Raymond, were graduates of Union; Presidents Maxcy and Nott bore the diplomas of Brown University, Presidents Smith and Edwards were Princeton men, and President Aiken a graduate of Dartmouth. The strict adherence of the college to the unsectarianism and Christian union which shaped the plans of its founders is apparent in the varying religious tenets of its several presidents. Presidents Smith, Edwards, Nott, Webster, and Raymond were Presbyterians, Dr. Maxcy a Baptist, Dr. Hickok a Congregationalist, and Dr. Potter an Episcopalian.

BUILDINGS AND GROUNDS.

The oldest buildings on the college grounds are the north and south college buildings, uniform in construction and 800 feet apart. The ends of each building contain residences for professors, and the central part, having three distinct entrances and sections, provides 48 rooms in each college. Backward from each of these buildings run the two "colonnades," each 250 feet long. These contain recitation rooms, lecture rooms, and apparatus. The colonnades terminate each in a larger, square building, the north building being devoted to the chemical and philosophical laboratories and lecture rooms, and the south to the chapel, registrar's office, and natural history museum. The museum of natural history is one of the finest in this country, being exceeded in the number and variety of its specimens only by that of Harvard University and the Smithsonian Institution at Wash-

ington. It comprises (1) the extensive collections, chiefly of marine animals, made by President Webster during his occupancy of the chair of natural history; (2) the celebrated Wheatley collection of shells and minerals, donated by E. C. Delavan; (3) specimens received from the National and State governments; and (4) contributions from friends and patrons of the college.

The philosophical museum is also rich in apparatus, especially in instruments illustrating electricity, magnetism, light, heat, acoustics, pneumatics, statics and dynamics, hydrostatics and hydraulics, and measurements.

The engineering department possesses the celebrated Olivier collection of models, consisting of about 50 models, representing the most important and complicated ruled surfaces of descriptive geometry, particularly warped or twisted surfaces. Their directrices are represented by brass bars, straight or curved, to which are attached silk threads representing the elements or successive positions of the generatrices of the surfaces. Each of these threads has a weight suspended by it, so as always to make it a straight line. These weights are contained in boxes sustaining the directrices and their standards. The bars are movable in various directions, carrying with them the threads still stretched straight by the weights in every position they may take; so that the forms and natures of the surfaces which they constitute are continually changing, while they always remain "ruled surfaces." In this way a plane is transformed into a paraboloid, a cylinder into a hyperboloid, etc. These models were invented by the lamented Theodore Olivier while professor of descriptive geometry at the Conservatoire des Arts et Metiers, in Paris. One set of them is now deposited there and a second is in the Conservatory of Madrid. Copies of some of them are to be found in most of the polytechnic schools of Germany. The Union College set is the original collection of the inventor, having been made in part by his own hands, and after his death in 1853 retained by the widow till bought from her by Professor Gillespie in 1855. It is more complete than that in the Paris Conservatoire. It may be worth noticing that the silvered plates on the boxes, reading "Inventé par Theodore Olivier," etc., were added by Madame Olivier after the purchase, at her own expense, as a tribute to the memory of her husband, her own words being: "Je tenais à ce que chaque instrument portat le nom du savant dont la reputation passera à la posterité."

Memorial Hall, long a familiar object in the pictures, and originally designed for a chapel, was delayed for various causes, so that the foundation was not laid till 1858. The war and its attendant depressions interrupted the work, which was not resumed till 1874, and the present domed structure was evolved in 1876. This building, situated midway between, and in the rear of, the two main buildings, is nearly circular, 84 feet in diameter, the dome rising 120 feet from the floor.

It has never been of any particular use to the college, but is employed for the banquet hall at commencement time, and is adorned by paintings, statues, and works of art.

A president's house was built in 1873, and in 1874 a gymnasium, which, when finished, was one of the largest and best equipped in the country. All these buildings, except Memorial Hall, are of brick, roughcast with stucco or cement, producing the "gray old walls" celebrated in college song.

Some distance behind the circular building has recently been erected a handsome structure known as the Powers Memorial Building, finished in 1885. This consists of a chapel-like central building, with wings extending from it on either side in the form of a half circle. The central building forms a splendid receptacle for the 40,000 volumes which constitute the college library, and the wings contain the president's office and eight spacious and well-equipped recitation rooms.

The development of fraternity life is gradually introducing a more modern architecture on the college grounds. The Psi Upsilon fraternity recently secured the grant of a lot on the college grounds, to the rear of South College, and has erected on it a fine chapter house, costing $30,000. The Alpha Delta Phi Society has for several years owned a lot near the college gate, and has a considerable fund subscribed for building a chapter home, which it has decided to locate near the Psi Upsilon chapter house, on a circular path which is known as the "Grecian Bend." The Sigma Phi chapter has recently been enriched by a bequest of $40,000, and a building for this venerable fraternity is probable in the near future. Similar plans are contemplated by Delta Upsilon and other of the Greek-letter societies.

The original grounds acquired for college uses in Schenectady have been somewhat reduced by street improvements and the sale of lots, but are still amply sufficient, embracing about 125 acres, including the campus, gardens, and grounds properly belonging to the college and essential for its use, besides some 100 acres of woodlands and fields adjoining.

During the residence of Prof. Thomas Macauley, more than fifty years ago, a beginning was made in the improvement of a garden north of North College. The work was, however, scarcely more than a beginning until Prof. Isaac W. Jackson became a resident of the adjoining dwelling in 1831, when a series of improvements were begun which, aided by a small annual grant from the trustees, have gradually transformed a wild ravine and tangled woodland into a charming ramble and pleasant retreat. The grounds embrace some 12 acres, and combine many attractions of sylvan solitude and floral beauty. "Captain Jack," as the professor was affectionately styled by his pupils, devoted the last years of his life almost entirely to the beautifying of this garden, and under the spreading elm, which was his favorite resort, were held his funeral ceremonies at his death in 1877.

Besides the real estate in Schenectady the college owns a few lots in the city of New York and a large tract, comprising over 1,300 city lots, in Long Island City. This tract was received under the deed of Dr. Nott, and is of great value, already yielding the college a considerable annual income. The constant growth of Long Island City, its probable connection with New York City in the near future by tunnel or bridges, and its inevitable consolidation with the metropolis unite to make the college real estate of immense prospective value.

The trustees of the college are, by its charter as amended, the governor, lieutenant-governor, secretary of state, comptroller, treasurer, and attorney-general of the State, ex officio, thirteen chosen for life by the board of trustees, and four elected, one each year for a term of four years, by the alumni. The present trustees, exclusive of the ex officio members, are Silas B. Brownell, Rev. Dr. Wm. Irvin, Hon. Judson S. Landon, Hon. Edward W. Paige, Wm. H. H. Moore, Rev. Dr. Denis Wortman, Hon. John H. Starin, Clark Brooks, John A. De Remer, Rev. Dr. George Alexander, Robert C. Alexander,[1] Hon. Warner Miller, N. N. V. Franchot, S. K. Williams, Col. Charles E. Sprague, Howard Thornton, and Wallace T. Foote.

The faculty as now constituted is made up as follows: A. V. V. Raymond, D. D., LL. D., president; John Foster, LL. D., Nott professor (emeritus) of natural history; Henry Whitehorne, LL. D., Nott professor of the Greek language and literature; William Wells, LL. D., professor of modern languages and literature and lecturer on current history; Maurice Perkins, A. M., M. D., professor of analytical chemistry; Sidney G. Ashmore, A. M., L. H. D., professor of the Latin language and literature; James R. Truax, A. M., Ph. D., professor of the English language and literature; Thomas W. Wright, A. M., Ph. D., professor of applied mathematics and physics; Frank S. Hoffman, A. M., professor of mental and moral philosophy; Benjamin H. Ripton, A. M., Ph. D., professor of history and sociology, and dean; Olin H. Landreth, A. M., C. E., professor of civil engineering; James L. Patterson, Sc. D., professor of mathematics; Samuel B. Howe, Ph. D., adjunct Nott professor, principal of Union school; Albert H. Pepper, A. M., assistant professor of modern languages; James H. Stoller, A. M., professor of biology; Edward Everett Hale, jr., Ph. D., professor of rhetoric and logic; Philip H. Cole, A. M., assistant professor of English; Edwin H. Winans, A. M., assistant professor of mathematics; Homer P. Cummings, instructor in surveying; Wendell Lamoroux, A. M., librarian and lecturer; C. P. Linhart, M. D., instructor in physiology and physical education; Geo. V. Edwards, A. M., instructor in Latin and Sanskrit; Howard Opdyke, A. B., instructor in mathematics and physics; Elton D. Walker, B. S., instructor in engineering; John I. Bennett, A. M., instructor in Greek, besides a corps of 36 lecturers.

[1] Deceased, 1900.

The general catalogues of Union College contain a list of names of which both the college and the country may well be proud. In the total number of its graduates it stands at least fourth, and perhaps third, among American colleges. The number of its alumni is nearly double that of any other college in New York State. Its graduates have become prominent in every profession and walk in life. Among the number have been a President of the United States, two Secretaries of State, two justices of the United States Supreme Court, ten Senators, two Speakers, and one hundred and thirty members of the House of Representatives. Thirty-six college presidents have had their educational ideas molded at Union and have transplanted them to other institutions. One-fifth of the whole number of judges elected to the bench of the court of appeals and of the supreme court in New York State have been Union College graduates.

The general alumni association was organized and incorporated in 1857, and local associations have been formed in New York City, Albany, Chicago, Rochester, St. Paul, Boston, San Francisco, and Washington. The New York association has over 500 members.

ELECTIVE COURSES.

"Elective courses, not elective studies" were declared by the late President Webster in a recent address to be the present policy of Union College. There are, it is true, a considerable number of elective studies arranged in the latter stages of each course, but the aim has been rather to increase the number of definite, well-arranged courses than to enlarge the list of optional studies in the courses.

Union now offers, in its academic department, one A. B. course, one B. S. course, one Ph. B. course, three B. E. courses, and one graduate C. E. course. These courses are distinguished as follows:

COURSES OF STUDY.

[Beginning September, 1895.]

1. *Course leading to the degree of A. B.*—This is the usual classical course. After the sophomore year the work is largely elective. French and German are included in addition to the ancient languages. Students may pursue additional studies in other courses.

2. *Course leading to the degree of Ph. B.*—This differs from the A. B. course chiefly in the omission of Greek and the substitution therefor of additional work in modern languages and science.

3. *Course leading to the degree of B. S.*—The modern languages are here substituted for the ancient, and the amount of mathematical and English studies is increased. After the sophomore year a large list of electives is offered.

4. *General course leading to the degree of B. E.*—This course is intended to give the basis of an engineering education, including the fundamental principles of all special branches of the profession, a knowlege of both French and German, and a full course in English.

5. *Sanitary course leading to the degree of B. E.*—This differs from course 4 in substituting special work in sanitary engineering for some of the general engineering studies.

6. Electrical course leading to the degree of B. E.—This differs from course 4 in substituting special work in electricity and its applications in place of some of the general engineering studies.

7. Graduate course in engineering leading to the degree of C. E.—A course of one year offered to graduates of course 4, 5, or 6.

The arrangement of studies in the course leading to the degree of A. B. is as follows:

FRESHMAN YEAR.

FIRST TERM.

Hours per week.

4 Greek—Xenophon or Homer.
4 Latin.
2 English. (Clearness; study of words.)
4 Solid geometry.
1 Physiology.
1 Physical culture.
Greek prose composition.
Latin prose composition.

SECOND TERM.

4 Greek—Xenophon, Homer, or Herodotus.
4 Latin.
3 English. (Past and present; rhetoric, intellectual qualities.)
4 Algebra.
1 Physiology.
1 Physical culture.
Greek prose composition.
Latin prose composition.
One extemporaneous essay—an abstract.

THIRD TERM.

4 Greek—Xenophon, Herodotus, or Euripides.
4 Latin.
3 English—rhetoric, emotional qualities.
3 Trigonometry.
2 History.
1 Physical culture.
Greek prose composition.
Latin prose composition.
One extemporaneous essay—an amplification.

SOPHOMORE YEAR.

FIRST TERM.

Hours per week.

3 Greek—Euripides or Æschylus.
3 Latin.
3 English—Chaucer and the early poets.
3 Analytic geometry.
3 French.
2 History.
1 Physical culture.
Greek prose composition.
Latin prose composition.
One formal essay—descriptive.
One extemporaneous essay—narrative.

SECOND TERM.

3 Greek—Euripides or Æschylus.
3 Latin.
3 French.
2 English—Shakespeare and the dramatists.
2 History.
3 Logic.
1 Physical culture.
Greek prose composition.
Latin prose composition.
One formal essay—expository.
One class oration.

THIRD TERM.

3 Greek—Euripides, Sophocles, or Plato.
3 Latin.
3 English—the essayists.
3 French.
3 Biology.
1 Physical culture.
Greek prose composition.
Latin prose composition.
One extemporaneous essay—expository.
One class oration.

JUNIOR YEAR.

FIRST TERM.

Hours per week.

3 German.
2 English—prose fiction and modern poetry.
4 Mechanics.
2 History.
5 Elective.
One extemporaneous discussion.
One formal essay—argumentative.

SECOND TERM.

3 German.
3 Physics.
4 Psychology.
2 History.
4 Elective.
One formal essay—argumentative.
One class oration.

THIRD TERM.

3 German.
3 Physics.
4 Ethics.
3 Geology.
3 Elective.
One extemporaneous discussion.
One chapel oration.

SENIOR YEAR.

FIRST TERM.

Hours per week.

3 Economics.
3 Logic.
10 Elective.
One extemporaneous discussion.
One extemporaneous essay—argumentative.

SECOND TERM.

3 Sociology.
3 Astronomy.
10 Elective.
One formal essay—argumentative.
One chapel oration.

THIRD TERM.

3 Sociology.
13 Elective.
One formal essay—argumentative.

The B. S. course differs from the above arrangement in the elimination of the Greek and Latin and the substitution of the modern languages with an increased amount of mathematics and English studies. The Ph. B. course eliminates the Greek only, and inserts the modern languages and the mathematics of the B. S. course, increasing the amount of English studies. The B. E. course retains all the mathematics, modern languages, and advanced studies of the other courses, and includes also drawing, surveying, field work, architecture, calculus, sanitary and electrical engineering, hydraulics, etc.

REQUIREMENTS FOR EXAMINATION IN 1895.

I. Candidates for admission to the freshman class in any of the regular courses will be examined:

1. *In English.*—English Grammer: Bain's Higher English Grammar, West's English Grammar, and Strang's Exercises in English are recommended. A short English composition will be required to test spelling, punctuation, use of capitals, paragraphing, and grammatical purity.

No candidate will be admitted whose written work is seriously defective in these respects.

2. *In mathematics.*—Arithmetic; algebra, through quadratics; plane geometry.

II. Candidates for admission to the freshman class in the course leading to the degree of A. B. will be examined in addition:

1. *In Latin.*—Latin grammar, Allen and Greenough's (or an equivalent), including prosody; Cæsar, four books, or Arrowsmith and Whicher's First Latin Readings (preferred); Vergil's Æneid, six books; Cicero, six orations; Sallust's Catiline or Jugurtha; Daniell's Exercises in Latin Composition, Part I (or an equivalent); H. T. Peck's Latin Pronunciation.

2. *In Greek.*—Goodwin's Greek Grammar; Goodwin's Greek Reader, 100 pages (or an equivalent); Xenophon's Anabasis, four books; Homer's Iliad, three books.

(The attention of instructors is particularly directed to the student's need of a full and accurate knowledge of the Greek and the Latin grammar. Deficiency in this knowledge will prevent admission.)

3. In history.—Greek and Roman history, including ancient geography.

Those intending to pursue the above course should enter at the beginning of the freshman year fully prepared; without such preparation, time and strength needed for regular studies are consumed in making up deficiencies. If, in their preparation, candidates have time to spare, it is desirable for obvious reasons that they should not anticipate the college studies.

III. Candidates for admission to the freshman class in the course leading to the degree of Ph. B. will be examined as in II, except that an equivalent amount of French or German may be substituted for Greek.

IV. Candidates for admission to the freshman class in the course leading to the degree of B. S., in addition to the subjects in I, will be examined:

1. In modern geography.
2. In history of the United States, to the close of the civil war.
3. In rhetoric—Nichol's Manual of English Composition, or an equivalent.
4. In English literature—The general course of development of English literature, as presented in Stopford Brooke's or Kellogg's English Literature, Pancoast's Introduction to English Literature, or an equivalent.
5. In solid geometry.

V. Candidates for admission to the freshman class in any of the courses leading to the degree of B. E. will be examined as in IV.

The marking system is in vogue at Union, the highest mark for term work being ten, and any mark below six fails to sustain a student. The ten highest grades for the whole course entitle the seniors taking them to appointments at commencement.

To a large class of students Union College presents extraordinary advantages in its numerous scholarships. Under an act passed in 1814 the sum of $50,000 was set apart as a fund the income of which has ever since been applied in aiding young men of narrow means, and thus multitudes have gone out into active life well prepared who but for this would have failed to receive a thorough education. This aid is granted without reference to the intended profession and with the sole object of accomplishing the greatest good. Other bequests of $50,000 each for the same purpose were made by the late Miss Catharine L. Wolfe and Dr. John McClelland, of New York. Still further scholarships (some of which, however, are not yet available) were provided by the trust deed of President Nott, who designated $125,000 to be set apart for the endowment of several grades of prize scholarships. In the scholarships of the first grade the incumbents, on the condition of good conduct and satisfactory application to study, receive at the end of each term a credit on the books of the registrar to the full amount of the term bill. These scholarships are accessible, under certain restrictions, to all who present the requisite certificates of character and sustain the examinations required for admission to the regular classes of the college.

The college offers a series of annual prizes, which are awarded at each commencement. These are—

(1) The Blatchford oratorical prizes of $40 and $30 each, awarded to the two members of the graduating class who deliver at commencement the best orations.

(2) The Warner prize of the value of $50 is awarded to the senior who shall have attained the highest standing and who shall also sustain the best character for moral rectitude and deportment.

(3) The Ingham prize of $70 for the best senior essay on an assigned subject in English literature.

(4) The Allen prizes of $25, $20, and $15, respectively, for the best senior essays on subjects assigned.

(5) The Clark prizes of valuable books, awarded to the writers of the two best junior essays on assigned subjects in English literature.

(6) The Robert C. Alexander prize of $50 for the best extemporaneous speech at a public competition, the topic being assigned immediately before the competition.

(7) Two oratorical prizes are annually awarded to the two juniors and the two sophomores who deliver the best orations on the occasion of the prize-speaking contest in commencement week.

(8) *Engineering prize.*—A prize is offered by the class of 1889 for three years, beginning in 1893. It will be awarded to the member of the graduating class in the engineering course who presents the best thesis.

(9) *Allison-Foote prize.*—Founded by George F. Allison, of New York City, and Hon. Wallace T. Foote, of Port Henry, N. Y., for the encouragement of debate in the literary societies. The prize consists of $100 in cash, and is to be awarded as the result of a public competition between representatives of the Adelphic and the Philomathean literary societies. Fifty dollars will be awarded to the society presenting as a whole the strongest argument. The remaining $50 will be awarded to the debater who makes the best single speech, regardless of his society relation.

(10) *The Gilbert K. Harroun prize.*—A prize consisting of $50 in gold has been established by Mr. Gilbert K. Harroun, treasurer of Union College, to be awarded at commencement to that member of the graduating class who shall present the best thesis on an assigned subject in sociology. The thesis must contain not less than 3,500 nor more than 4,000 words, must be typewritten, and must be presented on or before June 1 to the professor of history and sociology. The committee of award is appointed by the donor.

The exercises of commencement are always held on the fourth Wednesday in June. Ten of the graduating class deliver orations, and the exercises are concluded with an oration by the honorary chancellor, selected for that purpose by the board of trustees. Among the recent honorary chancellors have been Hon. George William Curtis, Hon. John K. Porter, Hon. Alexander H. Rice, of Massachusetts; Rev. Dr. R. S. Storrs, Hon. Charles E. Smith, late United States minister to Russia; William H. McElroy, of the New York Tribune; Gen. Daniel Butterfield, Hon. Pliny T. Sexton, Hon. Charles T. Saxton, Hon. Joseph M. Carey, and Bishop Henry C. Potter.

Union College commanded a great deal of attention by reason of the course of lectures which was established at that institution by Maj. Gen. Daniel Butterfield, of New York (class of 1849). His scheme was remarkable in its wide scope and in the number and character of the lecturers, and in the great eminence of many of them. The purpose of the course of lectures was to give to the students in the college a glimpse of many practical problems and to present to them from the highest quarters lessons in the tasks and duties of citizenship. General Butterfield not only assumed the whole pecuniary responsibility, but secured a score of gentlemen whose names were assurance of the marked success of the project.

The value of such a glimpse of great questions, presented by speakers who have won distinction in their many different fields, is by itself a liberal education. The college can not fail to receive very great advantage from it, both in the number of its students and, in what is of very much more account, in the elevation of its spirit and in the practical character of its training.

The course was marked out to extend over about three years, as follows:

THE BUTTERFIELD LECTURE COURSE.

THE WEST POINT MILITARY ACADEMY.

Its foundation, history, and purposes; its course and system of training; its unwritten code of honor, and the benefit of its training and discipline for any vocation in life. What it has done for the country in both military and civil life. What of it may be common to all educational institutions.

1. By Gen. P. S. Michie, professor of mathematics and dean of the faculty of the West Point Military Academy.
2. By Gen. Horace Porter.

POLITICS IN THE UNITED STATES.

The necessity for and the duty of young men in familiarizing themselves with political and party usages and customs, and in participating in primary elections and caucuses; party government in the United States; the higher duties of American citizenship.

3. By Hon. William McKinley, jr., governor of Ohio.
4. By Hon. Thomas F. Bayard, ex-Secretary of State.

THE DIPLOMATIC AND CONSULAR SERVICE.

The customs and usages of diplomacy, and how to become familiar with them. What has been accomplished for the United States by its diplomacy.

5. By Hon. Andrew D. White, ex-president of Cornell University, and United States ambassador to Germany.
6. By Hon. Frederick W. Seward, '49, formerly Assistant Secretary of State.

ELECTRICITY.

Its properties and latest development.

7. By Albon Man, '49.

JOURNALISM AND THE PRESS.

How college men may best qualify themselves for the profession.
8. By Hon. Charles A. Dana, editor of the New York Sun.
9. By William H. McElroy, LL. D., '60, editor of the New York Tribune.

WEALTH AND ITS USES.

The practical value of a college training for business men.
10. By Andrew Carnegie.
11. By Hon. Chauncey M. Depew.

COLLEGE WORK AS A PREPARATION FOR THE DUTIES OF LIFE.

12. By Hon. Warner Miller, '60.
13. By Gen. Daniel Butterfield, '49.

TRADE SCHOOLS—THE ELEVATION OF LABOR—INDUSTRIAL EDUCATION.

14. By Col. R. T. Auchmuty, founder of the New York trade schools.
15. By Prof. Rossiter W. Raymond.

BANKING AND FINANCE.

Currency and its political economy.
16. By Hon. George S. Coe, president of the American Exchange Bank of New York.

AMERICAN FINANCE.

17. By Senator John Sherman, ex-Secretary of the Treasury.

ART AND ARCHITECTURE.

Honesty and truth in their purpose and expression.
18. By Montgomery Schuyler, '34.

THE POLITICS AND DIPLOMACY OF PRESIDENT LINCOLN'S ADMINISTRATION.

19. By Gen. Daniel E. Sickles.

THE DEVELOPMENT OF THE WEST AND SOUTH.

"Westward the star of empire takes its way."
20. By Hon. Charles F. Manderson, United States Senator from Nebraska, and President pro tempore of the Senate.

OLIVER WENDELL HOLMES.

21. By Rev. Edward Everett Hale, D. D.

COURTS-MARTIAL—MILITARY LAW—MARTIAL LAW.

The suspension of the writ of habeas corpus. Respective jurisdictions of the State and Federal courts in war and peace.
22. By Maj. John W. Klous, U. S. A., judge-advocate and professor of law, West Point Academy.

MUNICIPAL GOVERNMENT.

23. By Hon. Seth Low, ex-mayor of Brooklyn, and president of Columbia College.
24. By Abram S. Hewitt, ex-mayor of New York.

THE DUTIES OF A GOVERNOR AND HIS WORK.

25. By Alex. H. Rice, '44, ex-governor of Massachusetts.

THE MASSING OF POPULATION IN THE TENEMENT HOUSES OF CITIES—THE PROBLEM OF THE FUTURE.

26. By Hon. Bourke Cockran, M. C.
27. *Farming on a large scale.*—By Hon. Lyman R. Casey, United States Senator from North Dakota.
28. *Canada and the Great North Land.*—By Erastus Wyman.
29. *Relation of brain to muscle.*—By Dr. William A. Hammond.
30. *Lecture.*—By Hon. John Wanamaker, ex-Postmaster-General.

There were offered 30 prizes of $25 each for the best essay upon the subject of each of the lectures, and prizes of the value of $125, $60, and $30, respectively, upon the first, second, and third best series of papers upon the entire course of lectures. For the first, second, and third best papers upon any single lecture in the course prizes of $75, $40, and $20 each were given. In addition to the student prizes a prize of $150 was awarded to the private school or private teacher to whom the greatest number of prize winners shall have ascribed his college preparation.

Although Union College is an eleemosynary institution to so liberal an extent, its greatest present need is for unrestricted funds to be applied to general objects. Its largest endowments are trusts entailed to a particular purpose, as is the case with so many other of the older colleges of the country. An endowment fund for the establishment of new professorships or for increasing the salaries attached to existing chairs would be of substantial benefit. A handsome beginning in this direction was recently made by the gift to the college of valuable real estate in Plattsburg, N. Y., the annual income of which (about $6,500) is designated for the establishment of a professorship of political economy and social science. The donor is Mr. Thomas Armstrong, of Plattsburg. Other needs of the college are for new dormitories to accommodate the yearly increasing number of students and a hall for commencement and other public purposes similar to that lately provided for Princeton by the munificence of Mrs. Charles B. Alexander.

UNION UNIVERSITY.

Union University embraces the following institutions: Union College, Albany Medical College, Albany Law School, Dudley Observatory, Albany College of Pharmacy.

Union College acquired by its original charter full university powers, but the creation of graduate institutions at Schenectady was not found practicable. Schools of law and medicine and also an astronomical observatory had existed at Albany, only a few miles distant, for many years previous to 1873. The arrangement naturally suggested by these circumstances was that the professional schools and the observatary at Albany should be united with Union College under the charter and board of trustees of the latter. This was accordingly

effected by the incorporation of Union University in 1873. The Albany College of Pharmacy was created by the board of regents June 21, 1881, and incorporated as a department of the university August 21 of the same year.

The president of Union College and permanent chancellor of Union University has the oversight of the university, each of the institutions having its resident dean. The university board of governors is composed of certain of the permanent trustees of Union College and of representatives of each of the other institutions embraced in Union University.

The election of Dr. Harrison E. Webster as president in May, 1888, began a new era of progress and development in the history of Union College. He had been a member of the faculty from the time of his graduation in 1868 to the year 1883, and the members of twenty successive classes had carried away with them not only the highest respect for Professor Webster's ripe scholarship and his rare qualities as an instructor, but also a personal regard which was generally sincere affection for him as a personal friend. His election to the presidency of the institution to which he had given a lifetime of self-sacrificing devotion was therefore hailed with universal joy and enthusiasm.

President Webster served the college till January, 1894, when, by reason of ill health, he presented his resignation, which was accepted with many expressions of regret and of appreciation for his valuable services to his alma mater.

Early in 1894 the trustees selected as the successor of President Webster Rev. Dr. Andrew V. V. Raymond, a graduate of the class of 1875, and at that time pastor of the Fourth Presbyterian Church of Albany. There are many who link this coincidence with the youth, the enthusiasm, the oratorical ability, and the remarkable personal influence of Dr. Raymond, and draw a parallel between President Nott and President Raymond. Not since the war has the old college experienced such a period of prosperity and of hopeful enthusiasm as since the inauguration of President Raymond, which occurred in June, 1894. The classes have doubled in numbers, the teaching force has been largely increased, new endowments secured, and the standard of scholarship constantly elevated. New interest and enthusiasm have been inspired among the alumni and complete harmony exists in the college councils.

The celebration of the centennial anniversary of the charter of Union College was an event which stirred the loyalty and kindled the enthusiasm of every alumnus. Two years before preparations had been begun, looking to a fitting celebration of this interesting event. At the commencement of 1894 the organization of working committees was completed, and the year which followed was filled with busy preparations for the great event. The exercises extended over a period of five days, commencing Sunday, June 23, 1895. The centen-

nial programme was opened on Sunday morning by the memorial sermon of Rev. Dr. George Alexander, '66, pastor of the University Place Presbyterian Church in New York. In the afternoon a religious conference was held on religion and education, in which clergymen of the Reformed, Methodist, Baptist, Episcopalian, Presbyterian, and Roman Catholic denominations, respectively, took part, thus typifying, in a peculiarly impressive manner, the nonsectarian purposes of the college. The same evening the baccalaureate sermon was preached by Right Rev. William C. Doane, Episcopal bishop of Albany.

On Monday morning and afternoon an "educational conference" was held, in which part was taken by Secretary Melvil Dewey, of the board of regents; Superintendent Maxwell, of Brooklyn; Principal Bancroft, of Phillips Academy, Andover; President Scott, of Rutgers; President Andrews, of Brown, and President Taylor, of Vassar. The conference was continued in the evening, and the invited speakers were President Gilman, of Johns Hopkins; President Low, of Columbia; President Hall, of Clark University; President Harper, of Chicago University, and Chancellor MacCracken, of the University of the City of New York.

On Tuesday, June 25, was held the annual meeting of the alumni, of whom over 600 were in attendance during the celebration. At the centennial banquet held in Memorial Hall President Raymond presided, and fraternal greetings from sister colleges were presented in eloquent addresses by Chancellor Anson J. Upson, of the State board of regents; Prof. George Herbert Palmer, of Harvard; President Patton, of Princeton; President Andrews, of Brown; Prof. Henry Parks Wright, dean of Yale College; Prof. John Haskell Hewitt, of Williams; Prof. Charles F. Richardson, of Dartmouth; Prof. J. H. Van Amringe, dean of Columbia College; Prof. William MacDonald, of Bowdoin; Prof. John Randolph Tucker, of Washington and Lee; President Scott, of Rutgers; Prof. Oren Root, of Hamilton; Prof. Anson D. Morse, of Amherst; President Taylor, of Vassar, and Chancellor MacCracken, of New York University.

In the afternoon of Tuesday, June 25, the class-day exercises of '95 were held in the college garden, and a reception was given by President and Mrs. Raymond. In the evening commemorative exercises were held, presided over by Rev. Dr. Charles D. Nott, '54, at which addresses were given by Judge George F. Danforth, '40, and Rev. Dr. Stealy B. Rossiter, '65, while the centennial poem was read by William H. McElroy, LL. D.

A unique feature of the celebration was that on Wednesday morning, June 26, consisting of a flag raising with an artillery salute. The exercises, which were held in the open air, were presided over by Gen. Daniel Butterfield, '49; Maj. Austin A. Yates, '54, made an eloquent and patriotic oration, and a poem was read by Col. Weston Flint, '60. On the same morning exercises typifying "Union College

in professional life," presided over by Hon. William H. H. Moore, '44, were held under a tent on the campus, and addresses on behalf of the three learned professions were made by Rev. Dr. Teunis S. Hamlin, '67; Maj. J. V. R. Hoff, M. D., '71, and Hon. J. Newton Fiero, dean of the Albany Law School. The alumni banquet was held at noon in Memorial Hall, presided over by Hon. Amasa J. Parker, '63, president of the General Alumni Association, at which speeches were made by representatives of the decennial classes and others.

In the afternoon of June 26 was held the celebration of the semicentennial of the engineering school of Union College, at which addresses were made by Cady Staley, '65, president of the Case School of Applied Science; Hon. Warner Miller, '60; Gen. Roy Stone, '58, and Prof. O. H. Landreth, '76.

The exercises of Wednesday evening were especially interesting. They were presided over by Hon. John Gary Evans, '83, governor of South Carolina; Hon. David C. Robinson, '65, and Hon. Charles Emory Smith, '61. At this ceremony was first played the Union College Centennial March, composed by John T. Mygatt, '58.

The centennial ceremony was concluded on commencement day, June 27, when, following the orations of graduates, a brief address was made by President Eliphalet Nott Potter, of Hobart College, and the chancellor's oration was delivered by Right Rev. Henry C. Potter, bishop of New York.

Thus closed the first century of Union College, a century of usefulness, of progress, and of development. The second century opens with the happiest auguries for the future—a future bright with hope and promise.

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HAMILTON COLLEGE, 1812.

Hamilton College, at Clinton, had its origin in the Hamilton-Oneida Academy, chartered by the regents January 31, 1793, upon petition of Samuel Kirkland, Jonas Platt, Eli Bristol, Erastus Clark, Joel Bristol, Sewell Hopkins, James Dean, and Michael Myers. The founder of the enterprise was the Rev. Samuel Kirkland, whose name leads in the list of petitioners. He had spent the best portion of his life as a missionary to the Oneida Indians, and in the treaty held with this tribe in 1788 he received with his two eldest sons valuable lands amounting to 4,750 acres. Of this he gave several hundred acres for the endowment of an institution of learning, and in the preamble of this conveyance he set forth his motives as follows:

A serious consideration of the importance of education and an early improvement and cultivation of the human mind, together with the situation of the frontier settlement of this part of the State, though extensive and flourishing, yet destitute of any well-regulated seminary of learning, has induced and determined me to contribute of the ability wherewith my Heavenly Benefactor hath blessed me, toward laying the foundation and support of a school or academy in the town of Whitestown, county of Herkimer, contiguous to the Oneida Nation of Indians, for the mutual benefit of the young and flourishing settlements in said county and the various tribes of confederated Indians, earnestly wishing the institution may grow and flourish; that the advantages of it may be extensive and lasting, and that under the smiles of the God of Wisdom and Goodness it may prove an eminent means of diffusing useful knowledge, enlarging the bounds of human happiness, aiding the reign of virtue, and the Kingdom of the Blessed Redeemer.

The deed conveyed several parcels of land, one lot being declared inalienable, which has since been held as the site of Hamilton College, the remainder being left to be disposed of as the trustees might deem proper. Mr. Kirkland died February 28, 1808, having witnessed the first stage of fulfillment of his hopes in an academy and the first efforts toward its enlargement as a college.

The academic charter was granted January 31, 1793, under the name and with the trustees that had been proposed in the petition.

Operations were commenced as soon as the means could be provided and before enough had been raised to complete the academic building first erected. The resources of the country were feeble, the settlements new, and many of the settlers were poor. In 1795 the place was visited by a committee of the regents, consisting of Andrew King and John McDonald, and on the 3d of November, 1795, they reported the academy as in the following condition. They said that—

There is a frame of an edifice designed for an academy erected about a year ago, and it is partly inclosed. It is situated a mile and a half from the flourishing village of Clinton, on the Oriskany Mountain. It appears difficult of access and too distant from families where students might be accommodated with lodging and board. The frame is eighty-eight feet long, forty-two feet wide, and three stories high; has cost the trustees £1,000, and by the estimation will require for its completion upwards of £2,000 more. The trustees have been compelled to interrupt the work for want of money.

That there is a small schoolroom at the foot of the mountain, half a mile from

the academy, in which scholars have been formerly taught, but no teachers have been employed nor schools kept by the trustees since September, 1794.

That the trustees have not yet framed a system for the education and government of the institution nor established rates of tuition. Board may be obtained in the village of Clinton at eight shillings per week.

That the funds of the institution consist of 425 acres of land in the neighborhood of the academy, chiefly uncultivated, and of $400 on a subscription not collected. An incumbrance of $1,000 has been laid on the lands by the trustees for the purpose of enabling them to raise the frame of the academy.

That your committee, from the present state of the institution, judged it inexpedient to employ any part of the donation appropriated to it by the board in the purchase of books or apparatus, mathematical or philosophical, during the present year.

Your committee further beg leave to remark the necessity of strict attention to the accommodations which applicants possess before they receive an act of incorporation. The impoverished and languishing state of the academies in general which they visit compel them to make this observation.

November 3, 1795.

ANDREW KING.
J. MCDONALD.

The trustees, after encountering many difficulties, were able to report, on the 31st of December, 1799, that they had completed so much of their building as was sufficient for the accommodation of a large school, and that they had procured the services of Mr. John Niles, from Greenfield Academy, Massachusetts, as an instructor. He had brought with him a letter of ample recommendation from President Dwight, of Yale College, and had opened a school on the 26th of that month. There were nearly twenty scholars already admitted, and the number was increasing daily.

On the 27th of February, 1800, the trustees described their house as covered and painted, and that five rooms were finished. It had cost about $5,000, for $2,000 of which they were indebted. It would require $3,000 to complete the unfinished rooms and erect the chimneys, which were not yet built. Their property consisted of two tracts of uncultivated land, worth about $600, but still unproductive. This did not include the academy and 17 acres of land adjoining, which was improved and fertile.

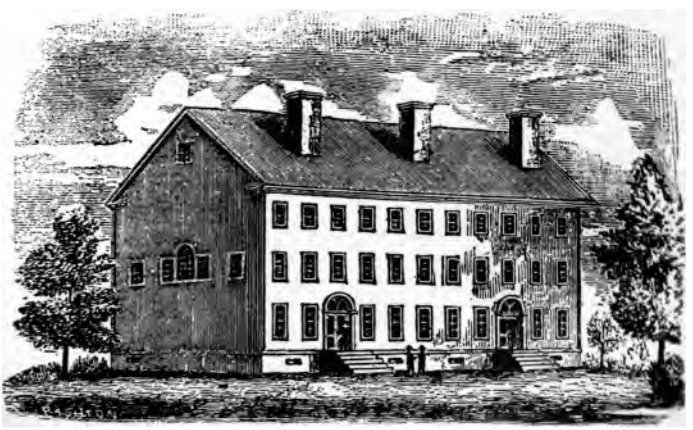
The following letter from Thomas R. Gold to James Cochran, dated January 29, 1800, has interest in this connection:

SIR: In answer to the inquiry relative to the present state and condition of Hamilton-Oneida Academy, I have to communicate: That however unfavorable the condition of the academy was on the last visit of the committee of the regents, yet at this time the friends of literature witness with pleasure the most flattering change in the prospects of this academy. This change commenced about fifteen months ago.

This institution is mostly finished, several rooms being completed and occupied. About fifty students are taught the Greek, Latin, and English languages, under the direction of Messrs. Niles and Murdock, two able instructors, who came highly recommended by President Dwight. As one of the trustees of this academy permit me to solicit on behalf of this institution, a visit from the regents.[1]

[1] Historical and Statistical Record of the University of the State of New York, etc. Franklin B. Hough, M. D., Ph. D., 1885.

KIRKLAND COTTAGE.



HAMILTON ONEIDA ACADEMY.

THE REV. SAMUEL KIRKLAND, FOUNDER OF THE ACADEMY.

The following extracts from an interesting article in the University Magazine for April 1890, give a vivid account of the character of the founder and of his efforts for the better education of the Indians and the white inhabitants of New York's western frontier:

Interwoven with Hamilton's early history are many interesting legends connected with the life of the founder of the college, Samuel Kirkland; but of all the stories of those early days there is one, told for the first time not long ago, which has more than ordinary interest and beauty.

Samuel Kirkland was a missionary to the Six Nations, and he had not labored long among the Oneidas before he had not only won their confidence, but also their love. Throughout all the Oneida nation, the "gentle paleface" had not a single enemy. He was the bearer of the Gospel's story, the wise counsellor, the sympathetic friend. And so it was natural, both in times of joy or of sorrow, that he should share in the merry-making or the mourning.

There came a day in the Oneida nation when to mourn was the lot of all; for Thranatiska, gentlest and most beloved maiden of all in the nation, was dying. It was a day in early spring, and as the warm afternoon wore on to its close the "White Father," as Dr. Kirkland was sometimes called, came to talk with the maiden of the Great Spirit, and the happy hunting-grounds of her fathers; and as he talked, very gentle and very simply, the great dark eyes grew more lustrous and the face seemed to gather more of beauty. Finally the maiden faintly spoke: "Master, Thranatiska does not fear the great Spirit; you have taught her to love Him. But the people I love are not so. Oh! Master, be kind to my people, make them all as great and as good as yourse'f; and Thranatiska, in her happy home, will always bless you." The "White Father" promised to care for her people, and, together they began to say "Our Father," but the maiden's voice grew fainter and fainter, and the missionary said the "Amen" alone in the presence of the dead.

And this is the legend of the founding of Hamilton, for Dr. Kirkland never forgot to do what he could for Thranatiska's people. They must be educated, and so the Hamilton-Oneida Academy was founded. This grew into the noble college, and old Hamilton's sons revere the memory of Samuel Kirkland and dwell lingeringly sometimes upon the story of Thranatiska.

It is the truth of history that the devoted missionary was a faithful friend of the Indians. He gave his whole life for them. It is probable that his interest in them was increased by his association with the Indian youths at Dr. Wheelock's Indian School, Lebanon, Conn. Dartmouth College grew out of that school. Doubtless the cordial relations which have always existed between Dartmouth and Hamilton have their origin in the fact that both colleges are the outgrowth of schools established to educate Indians. Indeed, the Dartmouth College "yell" of to-day seems to echo the Indian whoop, with which the campus of that institution once resounded. Dartmouth and Hamilton were born in the same wigwam; therefore they smoke the pipe of peace and set a good example to Harvard and Princeton.

Miles Standish, the Indian fighter, was one of the progenitors of Samuel Kirkland; but Kirkland was a man of peace. After his boyhood studies at Lebanon were completed, he entered Princeton College. While yet a student there his heart burned within him as he thought of the untutored children of the woods. "It was in January, 1765, when he was a student not yet twenty-four years old, that he left Johnstown and plunged into the wilderness. On that cold winter morning, one hundred and twenty-five years ago, he had a weary journey before him. With his two Indian guides he was to travel 200 miles, his feet shod with snowshoes and on his back a pack of 40 pounds; his path, the trail in the snow

made by the feet of his dusky leaders. He carried the germ and potency of Hamilton College. If the institution ever drifts from its Christian moorings how unworthy it will be of its early history." No small part of the load which Kirkland and his guides carried in their knapsacks through the wilderness consisted of choice treatises on Biblical learning.

His work was among the Six Nations, "the Romans of America." He built with his own hands a log house in an Oneida Indian village. To this house he brought his bride, a niece of President Wheelock, of Dartmouth. They journeyed by boat up the Mohawk River and on horseback through the woods to Oneida, his wife on a pillion behind her husband. In this Indian village his two sons were born. One of them, John Thornton Kirkland, afterwards became distinguished as president of Harvard College. During the Revolutionary war Kirkland was for a time chaplain in the American army. It also fell to him to endeavor to keep the Six Nations in a state of neutrality—to "astutely hold back those bloodhounds of war when they were eager to league with the forces of England to exterminate our infant settlements in central and western New York." The State of New York and the Oneida Indians made him a grant of valuable land in Oneida County in recognition of his faithful services. The eastern boundary of this plot has been marked by a granite shaft, erected on College Hill by the class of '87.

It was probably in 1791 that Kirkland built the small frame house which has been moved to the college campus and is known as Kirkland Cottage, "the cradle of Hamilton College." The cottage contains one family room, with ample fireplace, and three sleeping rooms. It was the "first sample of clapboard architecture" on the Kirkland patent. In this cottage door he sat, nearly a century ago, on Sabbath evenings in the presence of his swarthy, unconverted Bible class, some of whom had walked 30 miles to hear him. Here he received distinguished visitors. Indian chiefs and orators came to confer with him. Governor Clinton and Baron Steuben were his guests, as were also Timothy Dwight and Jeremiah Day when they were in central New York on a long vacation ride on horseback from Yale College.

When Kirkland was maturing his plans, he visited Philadelphia and conferred with the public men there, among whom was Washington, who became deeply interested in the proposed academy. Hamilton, the Secretary of the Treasury, and Postmaster-General Pickering furnished substantial aid. Hamilton was one of the trustees named in the petition for incorporation. In honor of him it was named Hamilton-Oneida Academy. A charter was granted January 31, 1793. Kirkland labored earnestly to secure funds for the building. In the college memorial hall is the original subscription paper, at the head of which is the following: "Samuel Kirkland, £10 0 0, and fifteen days' work; also 300 acres of land for the use and benefit of the academy, to be leased, and the product applied towards the support of an able instructor."

On July 1, 1794, the corner stone was laid by General Steuben, "the brave old warrior, who had come in our country's hour of trial to discipline her rude soldiery."

Among those present in 1794, when the corner stone was laid, was Schenandoa, the venerable Oneida chief. "His hair was white with unmelting snows." Kirkland lived long enough to see the institution he had founded enter upon its mission of wide usefulness. Those trained within its walls were going forth "to walk conspicuous in the world's light." The devoted missionary died in 1808, lamented by every friend of education and Christianity. Schenandoa sank into the sleep of death on the 11th of May, 1816, aged about 110 years. In the twilight of his life he said: "I am an aged hemlock. The winds of a hundred winters have whistled through my branches. I am dead at the top." He requested that his grave might be made near Kirkland's. "Bury me beside my white father, so that I may cling to the skirts of his garments and go up with him at the great resurrection."

FOUNDING OF THE COLLEGE.

In 1805 application was made to the regents for a collegiate charter, which was, however, denied on the claim that the academy possessed inadequate means.

Another unsuccessful petition was presented to the regents in 1811, in which the statement was made that a fund of $15,000 might easily be procured.

At the same session, and at about the same time, Kingston Academy renewed the application made by it long before for incorporation as a college, and both applications were referred to the same committee. They reported that in their opinion no college ought to be started with a fund less than $50,000 in amount, which neither of the applicants possessed. But aside from this, and upon the theory that this sum could be raised, there were questions of expediency and the general welfare of literature that should be duly considered. Perhaps another college might properly be founded in the western district at no distant day, and when this should be done every question having reference to location should be carefully considered. With respect to the middle district, the want was not so apparent, but if decided upon, Kingston would be the preferable place. Upon the 11th day of March, 1811, both petitions were denied and the friends of Hamilton-Oneida Academy were delayed for the time, but not without hopes of better success at no distant day.[1]

In January, 1812, printed petitions were circulated, addressed to the regents, and of the following form:

The Memorial and Petition of ——— Respectfully Sheweth:

That if, to accommodate the citizens of the Eastern and Southern districts, a College has been founded and organized in each of these great divisions of the State, no good reason can be assigned why the western district, which exceeds them in population and extent, should not be invested with a similar privilege.

That the time has arrived when, in the opinion of your petitioners, the interests of the public require the incorporation of a College in the County of Oneida. In support of this opinion your petitioners beg leave to state that by examining the relative position and circumstances of the several counties in the Western district, and by adverting to the course of trade and the route of communication between the remote parts of this State, it would appear that no county westward of Albany and equally central combines the advantages of extensive business, of concentrated population and of expeditious communication with the extreme sections of the district in an equal degree with the county of Oneida.

Your petitioners further represent to your Honorable Board that in regard to the actual site of the contemplated College, Hamilton-Oneida Academy in the village of Clinton presents, in their opinion, stronger claims for an act of incorporation than can be offered by any other situation in the country, because should it be proposed to establish a College elsewhere, a violent competition would inevi-

[1] The academic report of 1811, the last one they had occasion to make, showed an attendance of 150, of whom 5 were in reading and writing, 76 in English grammar, 30 in mathematics, 30 in the dead languages, 25 in logic, rhetoric, and composition, and 2 in moral philosophy. Value of lot and building, $11,525; of other real estate, $2,357; of personal estate, $850, and of apparatus and library, $447; tuition, $740, being from $8 to $12 per annum to each student. Principal Seth Norton, with salary of $650, and Eli Eddy, A. B., as assistant, with $240. Library, about 200 volumes, etc.

tably arise between the several villages whose situation might be thought adapted to the conveniences and wants of such an institution, because that Academy is the oldest Seminary of learning in the Western District, and because in it, both Classical and Mathematical literature have been as extensively cultivated as in any similar institution in the State.

Your petitioners, therefore, respectfully pray the Regents of the University to invest Hamilton Oneida Academy with collegiate powers and privileges, and from the great liberality of the inhabitants living in its vicinity, and from the strong interest extensively created in its behalf, no apprehension can reasonably be indulged that the institution will be suffered to languish for want of adequate support. If the proximity of Union College be adjudged as an objection to the prayer of your petitioners, they respectfully reply that a complete refutation of the objection may be found in the fact that several of the American Colleges have a still greater proximity to each other, and are nevertheless in flourishing circumstances. . . .

Some opposition arose to this measure by those interested in the advancement of Fairfield Academy to a college, and Oneida Castle was mentioned by others as a preferable site. Efforts were at the same time being renewed at Kingston, but these did not prevent favorable action upon the application from Hamilton Oneida Academy. Resolutions to this effect were passed on the 10th of March, 1812, upon condition that funds should be raised which should, with those on hand, amount to $50,000.

This condition being met by valid subscription, the draft of a charter prepared by Chief Justice Kent was reported May 26, and ordered to be issued. Its yearly income was limited to $13,333⅓. The persons proposed in the foregoing memorial were appointed first trustees, with power to fill vacancies that might occur in their number, and the powers, privileges, and duties of the board were defined in detail. The president of the college was to hold his office during good behavior, but all other officers at the will of the trustees. The college might confer such degrees as were usually granted by any college or university in Europe.

The financial agent employed in getting subscriptions was the Rev. Caleb Alexander, long the successful principal of Fairfield Academy, and the benefactors of the college were widely scattered throughout the then settled part of the State. Stephen Van Rensselaer, of Albany, gave $1,000, the largest item, and Governor Tompkins gave $500.

There appears to have been an intention of making this a seat of medical as well as classical education, for in the recommendations of the first committee on college officers, besides a professor of chemistry and mineralogy, there was proposed to be one of surgery and anatomy, one of the institutes of medicine, and one of obstetrics.

PRESIDENTS OF HAMILTON COLLEGE.

[Quoted from the Public Service of New York (1882), Vol. III.]

Hamilton College has had eight presidents, all men of various learning, of intellectual strength and Christian integrity, and all ordained ministers of the Gospel

by Presbyterian or Congregational bodies. Five of them were graduates from Yale College, one from Glasgow University, one from Dartmouth, and one from Amherst.

The first president of the college, Rev. Dr. Azel Backus (Yale, 1788), had won high distinction as a preacher and classical teacher in Bethlehem, Conn. He loved his pupils, and treated them with paternal tenderness. In the class room he was independent of the text-book and used the resources of his own mind. His greatest power, however, was revealed in the pulpit. His address at the funeral of the Sachem Shenandoa, in the old white meetinghouse of Clinton, was full of genuine pathos. Dr. Backus died suddenly in December, 1816, aged 52. A volume of his sermons, with a brief sketch of his life, was published in 1824. Twenty-five graduates, in three classes, received diplomas signed by President Backus. Fourteen graduates of the class of 1817 received diplomas signed by Prof. Seth Norton.

In 1817 Rev. Dr. Henry Davis (Yale, 1796), then president of Middlebury College, was elected to succeed President Backus. At the same time he received and declined an election to the presidency of Yale College, to succeed Dr. Timothy Dwight. Dr. Davis was inaugurated as the second president in the fall of 1817. This administration covered a period of sixteen years. They were years of mingled sunshine and disaster, closing with full classes in 1833. Two hundred and fifty-five graduates received diplomas with his signature. He died in 1852, aged 82, having lived nineteen years in retirement and constant ill-health.

The third president, Rev. Dr. Sereno Edwards Dwight (Yale, 1803), was elected in the fall of 1833 and resigned in 1835, after giving diplomas to 33 graduates in two classes. Like his preeminent father, Timothy Dwight, the third president was a finished scholar and a brilliant preacher. Perhaps the most important question he was called to deal with was that of removing the college to Utica. He enlisted with the advocates of removal, and the final decision that the college must remain where its founder had placed it may have had something to do with his early resignation. President Dwight died in 1850, aged 67, after many years of bodily suffering.

The fourth president, Rev. Dr. Joseph Penney (Glasgow, 1813), was elected in 1835. He had been remarkably successful as a teacher at Flushing, Long Island, and as a pastor at Rochester, N. Y., and at Northampton, Mass. His large knowledge in every branch of science and literature made him a pleasant companion and a valuable instructor. He resigned in the winter of 1839, after giving diplomas to 44 graduates in three classes. His last years were spent in Rochester, where he died in 1860.

The fifth president, Dr. Simeon North (Yale, 1825), was promoted from the chair of ancient languages, which he had filled for ten years. During his long administration of eighteen years decided advances were made in all that contributes to the substantial worth, vitality, and usefulness of a college. President North resigned in 1857 after conferring diplomas upon 556 graduates in nineteen classes.

The sixth president, Rev. Samuel Ware Fisher (Yale, 1835), took charge of the institution in 1858. With restless energy and enthusiasm President Fisher devoted himself to bringing the college into closer sympathy with the community, and thus increasing its patronage and means of usefulness. He introduced the study of the Bible as a part of its regular curriculum.

His addresses before religious bodies were frequent and impressive. After conferring degrees upon 226 graduates, in eight classes, President Fisher resigned his office in July, 1866, to accept a call to the pastorate of Westminister Church, in Utica. He resigned his pastorate in January, 1871, and died in Cincinnati, Ohio, January 18, 1874.

The seventh president, Rev. Dr. Samuel Gilman Brown (Dartmouth, 1831), was called in 1866 from Dartmouth College, which he had faithfully served for twenty-seven years, first, in the chair of oratory and belles-lettres, and next in that of metaphysics and political economy. He entered upon the president's duties in the spring of 1867. As a teacher President Brown held the highest rank. His sermons were models of vigorous and polished thinking and writing. His Life of Rufus Choate was favorably received on both sides of the Atlantic. He resigned in 1881 and was succeeded by Rev. Henry Darling, D. D., LL. D.

President Darling made earnest efforts during his administration to increase the endowment of the college and to broaden the scope of its work in harmony with the general educational tendency of the time. The efforts to increase the property of the college met with considerable success.

In 1892, Dr. Darling was succeeded by the Rev. Melancthon Woolsey Stryker, D.D., then pastor of the Fourth Presbyterian Church, of Chicago. Upon his inauguration in January, 1893, a special resolution was passed by the trustees commending Prof. Edward North, L. H. D., for his services as acting president, from April 21, 1891, after President Darling's death, to the beginning of Dr. Stryker's presidency in November, 1892.

During the presidency of Dr. Stryker the curriculum has been somewhat further developed and reorganized. The present condition of the college will appear in the following description of the courses of instruction, scientific collections, grounds and buildings, library, etc.

COURSES OF INSTRUCTION.

These are two, the classical and the Latin-scientific, each occupying four years and ordinarily requiring an attendance upon not less than three recitations daily. It is intended that the two courses shall be equivalents in work demanded. Each of them, by the ample electives of the later two years, can be so modified as to satisfy widely varying individual preferences.

Their prime object is to form habits of alert and accurate thinking and to cultivate the arts of critical and effective expression. This vigorous and extended discipline of the mental and moral powers is sought through introduction to the leading facts and principles in literature and language, and in historical, philosophical, and physical science. The elements of Biblical and Christian knowledge are diligently taught.

University specialization is not attempted in any department, but thorough general introduction is given and a solid foundation is laid for graduate work.

In both courses term essays are required, as follows: For the first term, freshman and sophomore, these are in the department of English literature, and for the second term, freshman and sophomore, in the department of rhetoric; but in these second terms a prize essay upon one of the assigned subjects will be accepted in place of the term essay.

Appointments in the gymnasium, under the physical director, are required of all underclassmen.

In all cases two hours of laboratory work count as one hour of recitation.

The classical course leads to the degree of bachelor of arts, and the Latin-scientific course, omitting all Greek and affording increased room for the physical sciences and for English studies, leads to the degree of bachelor of science, or of literature, or of philosophy, according to qualification.

Graduates of three years' standing, who have continued their studies, are entitled to the degree of master of arts upon application to the president.

Resident graduates may receive the degree of M. A. by continuing their studies for one year under the direction of the faculty. They must, under approval, choose two related subjects, offer an extended thesis in one subject and meet a formal oral examination in both.

Students who have taken their A. B. degree at any other college with equivalent course may also become candidates for the degree of M. A. upon one year of strictly resident study. All resident graduate students will be charged for rent and tuition at undergraduate rates.

The fee for the second degree and diploma is $5, payable in advance.

Seniors and juniors may choose one or more of their studies for each term from the electives of an earlier year, if such studies have not been previously taken.

A student not returning his elective card properly filled within the time named upon the card will have studies assigned to him by the faculty at their next regular meeting, unless before that meeting he shall present to the faculty a properly filled card, together with a satisfactory excuse for his delay.

No student may change an elective later than the Wednesday next before the opening of the term, and only then upon written application, made to the faculty before 3 p. m., and by them duly approved.

SCIENTIFIC COLLECTIONS.

The Knox Hall of Natural History has been reconstructed after plans furnished by Mr. Frederick H. Gouge (70), of Utica, from the fund bequeathed by the late Hon. James Knox, LL. D., of Knoxville, Ill. The new building contains two spacious exhibiting rooms and a large lecture room, and also convenient storage and working rooms.

A specialty is made of the minerals from this State, and a large case is filled with them, a few from the same horizon in Canada being added. Among these may be found many unusual specimens, some of which are the finest known of their several kinds. By vote of the trustees this collection has been set up as a special tribute to Dr. Root, and is named the Oren Root collection of New York State minerals.

The geological and mineralogical cabinets and the collections in natural history include the following:

2,500 specimens of fossils and rocks to illustrate the geology of New York.
1,750 specimens to illustrate the geology of the United States.
600 fossils, mainly from the silurian formations of Europe.
10,000 specimens of ores and minerals.
2,000 specimens of land, fresh water, and marine shells.
300 specimens in ornithology from China.
Plants from China, presented by the late S. Wells Williams.
A case of birds from the Transit of Venus expedition.
300 specimens of Oneida County birds.
The Barlow collection, including 13,000 specimens in entomology, presented by the Hon. Thomas Barlow, of Canastota.

Judge Barlow has supplemented the recent gift of his large entomological collection by a fine group of specimens in ornithology and comparative anatomy. The college collections are extensive and important, and now quite fully represent the fauna of Central New York.

The Rev. Henry Loomis (class of '66), of Yokohama, has contributed 391 specimens of Japanese insects, and a rare collection of Japanese shells.

By the liberality of the late Hamilton White, of Syracuse, the college collections were enriched by the herbarium gathered by the late Dr. H. P. Sartwell, of Penn Yan, and well-known in scientific circles as a large and useful exhibition of our North-American flora. This herbarium is the result of fifty years of botanical study, search, and correspondence.

All the above specimens are accurately classified and labeled, securely mounted, and orderly arranged. They include a total of 346 specimens of North American birds; 279 foreign birds; 58 mammals; 3,354 flowering plants, and 395 ferns.

GROUNDS AND BUILDINGS.

The college is situated to great advantage at the very center of the State of New York. It is in the town of Kirkland, Oneida County, directly adjoining the village of Clinton, and with its easy access to great lines of travel it is at once rural and suburban. The city of Utica, where every train of the New York Central makes a stop, is but 9 miles northeast of Clinton, in plain view from College Hill, and can, if necessary, be reached by carriage in an hour. Utica is also a station upon the West Shore, and is the terminal of the Rome and Watertown, and of the Binghamton branch of the Delaware and Lackawanna. The connection between Clinton and Utica is by the Ontario and Western. By the same railway New York City (Weehawken station) is distant 226 miles.

The site of the college is exceptionally fine. The air is pure and dry, and the prospect is one of great natural charm.

The college stands upon a broad plateau, 300 feet above the valley and 900 feet above the sea, the hills rising high in the background to still wider prospects. It faces the sunrise and overlooks the beautiful valleys of the Oriskany and the Mohawk, and the noble ranges of hills beyond.

The harmonious landscape, the retired elevation, and the historic scene furnish an environment of ideal fitness for the training of large thought and high purpose.

The campus occupies a portion of the original government grant to Samuel Kirkland, which lay a little west of the line of property, fixed November 5, 1768, by treaty at Fort Stanwix between Sir William Johnson and the Six Nations. The intersection of the highway (at the middle of "Freshman Hill") by this treaty line is marked by an enchiseled stone erected by the class of '87.

The campus is a park of 42 acres adorned with stately and valuable trees. The Lombardy poplars were set out between the years 1804 and 1808 by the Rev. Samuel Kirkland; the older elms in 1830, by Othniel Williams, then treasurer of the college; and the groups of maple and ash before the dormitories, in 1836, by President Penney.

The southeastern portion of the campus, made attractive by the first memorial class tree (the elm of '56), contains also the group of hardy conifers known as the Gridley pinetum. This collection owes its extent and variety to the fostering of the late Rev. A. Delos Gridley (class of '39), and of his associate curators, the late Prof. Oren Root, sr., and the late John C. Hastings. The mementos of graduating classes have given to many points of the campus a peculiar interest.

The college cemetery, whose care is provided for by a fund given by the late Samuel A. Munson, of Utica, has this year been amply and thoroughly improved under the kind contributions of Mrs. C. C. Goldthwaite.

Upon the western side of the campus there is a fine athletic field, with a circular track (the gift of the class of '88), and ample baseball and football grounds. A covered stand has been erected here by the good will of Albert H. Chester, Sc. D., sometime professor of this college. There are also excellent tennis courts.

The present curators of the college grounds, by the appointment of the board of trust, are Messrs. Stryker, Hudson, O. Root, Benedict, and Brandt. Much attention has this year been given to the general care and improvement of the campus. The expenses incident to this work have been generously borne by Frank S. Weigley, esq. (class of '75), of Chicago, Ill.

Of the elder college buildings South College, with rearranged interior (1873), is now Hungerford Hall. North College, extensively and soundly rebuilt and finished most attractively and conveniently within (1884), is now named Skinner Hall, in recognition of the ample enabling gift by William H. Skinner, esq., of Vernon Center. The cabinet is now (since 1885) Knox Hall, with heightened roof and with abundant interior room and conveniences for the valuable collections and their exposition.

Southernmost of all the college buildings (1889) stands Silliman Hall, for which members of the college Y. M. C. A. are indebted to

our greatest recent benefactor, one of the trustees of the college, Horace B. Silliman, LL. D., of Cohoes. The building is handsome, spacious, and well-arranged, with parlors, reading room, and all appropriate conveniences. It is heated by steam and is well lighted at the expense of a permanent fund given by Dr. Silliman.

"Old Middle" has been remodeled (1891) into a noble modern gymnasium. This work was liberally provided for by Messrs. Arthur W. Soper, M. S., of New York City, and Alexander C. Soper ('67) and James P. Soper, of Chicago, as a memorial of their father, the late Albert Soper, of Chicago. By the recent kindness of Mr. Arthur W. Soper a new mathematical room has just been finished upon the first floor of this building.

The second story of the building, in one hall, is used for a track-room and for the practice-cage of the baseball battery. The third story, which includes under its truss-roof the formed fourth story, is the gymnasium proper. The building is lighted with gas, well warmed, and equipped with ample apparatus.

As a memorial of the late John Newton Beach, jr., sometime a member of the class of '94, a beautiful arbor has just been built by his father, John Newton Beach, of Brooklyn (class of '62). It is a most attractive structure, with deep-set battered walls of native rough-hewn limestone, ceiled with Georgia pine in natural finish, and cedar-shingled. The interior walls, window seats, and floor are all of stone. The seats are of oak timber. The structure measures 20 by 18 feet and spans the walk at the head of "Sophomore Hill," and about five rods above the site of the old arbor. It is picturesque and commands fine glimpses of valley and hill. With its air of permanence and dignity it offers a suitable introduction to the upper path, and to its present tender associations the years will add those of romance. The kindness of Dr. Edward North has allowed the arbor to be built upon his land, and again we are indebted for an effective architectural result to the filial assistance of Mr. Frederick H. Gouge (class of '70), of Utica.

THE LIBRARY.

The Perry H. Smith Library Hall was completed in 1872. It contains a steadily-growing library, which is increasingly a practical working force. The books are classified and arranged under the Dewey system. The card catalogue has just now been completed.

The library is open every college week-day from 9 o'clock to 12, and from 2 to 5. Students are allowed free access to the alcoves. Tables and chairs are arranged for their convenience and the librarian and his assistant are ready to give counsel in any line of reading and research. Books from the reference library, and those reserved by request of instructors as collateral reading, may be drawn only at the close of the library hours and must be returned upon the opening of

the library. Other books may be retained, not more than three at a time, for two weeks, and may then be drawn anew if not applied for by another.

The library contains the following special collections:

The William Curtis Noyes Law Library of 5,000 volumes.

The Edward Robinson Library of 2,000 volumes.

The Charles H. Truax Classical Library of 1,250 volumes.

The Edward Danforth section in education has 1,000 volumes; the Munson section in German and French, 850 volumes; the Mears section in philosophy, 250 volumes; the Tompkins section in mathematics, 175 volumes; the class of 1890 section in political science, 86 volumes; the Soper section upon the tariff, 100 volumes.

There were added during the year ending June 1, 1893, 1,875 volumes and 3,092 pamphlets. Of these, 1,001 volumes and 2,827 pamphlets were by gift from 183 sources.

The total of June 1, 1894, was 32,860 volumes and 11,991 pamphlets.

HONORS.

There are 40 permanent scholarship endowments, with incomes of from $60 to $100. Mr. Samuel H. Jardin, of Philadelphia, has given $4,000 for a permanent scholarship. Other scholarship funds include the recent gift of $3,500 by Mr. Theodore S. Hubbard, of Geneva; $3,000 by Horace B. Silliman, of Cohoes; $4,000 from the Marquand estate; $2,000 by Mr. John B. Wells, of Utica; $12,000 by the late Miss Laura Carter, of Geneva; $2,000 by Mrs. Dr. Sylvester Willard, of Auburn; $2,000 by Mr. Alexander Folsom, of Albany; $1,500 by Mr. William Burton, of Waterford; $1,500 by C. C. Sheppard, of Penn Yan; $2,000 by the late Marcus Judson, of Watertown; and $2,000 by the late Mrs. S. L. Bradley, of Auburn.

By the gift of $10,000, the late Hon. Elias Warner Leavenworth, LL. D., of Syracuse, established a scholarship under particular terms.

An academic prize scholarship, endowed by the Hon. Ira Davenport, of Bath, yields $100 a year to a graduate of the Haverling Institute of Bath.

The regular graduating honors, membership in the society of $\Phi B K$, an entrance prize, and 15 other valuable prizes, 4 prize scholarships, and a fellowship, are among the incentives to diligent work.

LAW SCHOOL OF HAMILTON COLLEGE.

In 1832 William H. Maynard, a prominent lawyer of Utica, by his last will gave $20,000 for the endowment for a professorship of law, and of civil polity and of political economy in Hamilton College. The property consisted of unimproved real estate which could not be immediately sold, and several years elapsed before it became fully productive. The instruction given under it was at first in the undergraduate course, and all students graduating from the college had an opportunity of instruction in law as a part of the studies of the senior class.

About 1854 Prof. Theodore W. Dwight, then filling this professorship, secured the establishment of a law school in connection with his duties. And on the 12th of April, 1855, the legislature provided for the admission of its graduates to the

rights of an attorney, upon examination by persons appointed by the supreme court. This act continued until 1877 when it was in part repealed.[1]

SUMMARY OF ALUMNI.

[Based upon the triennial catalogue of 1893.]

Whole number of alumni (including honorary degree men)	2,728
Stelligerent alumni	902
Whole number of alumni living	1,826
Graduates of the Maynard Law School	239
Whole number of classical graduates	2,116
Stelligerent classical graduates	694
Whole number of living classical graduates	1,422
Lawyers	518
Clergymen	836
Clergymen in the Synod of New York	174
Foreign missionaries	38
Moderators of the Presbyterian General Assembly	5
Commissioners to the General Assembly of 1894	18
Members of Congress	29
State governors	5
State senators	26
Members of State constitutional conventions	20
Supreme court judges	30
College presidents	16
Regents of the University of State of New York	8
Trustees of Hamilton College	41
Sons of alumni admitted to Hamilton College	246
College professors and tutors	130
Theological seminary professors	23
State superintendents of public instruction	6
Normal school principals and professors	18
Principals of academies and high schools	130
Physicians	110
Bankers and brokers	55
Editors	74
Agriculturists	25
Merchants	51
Civil engineers and architects	15
Manufacturers	22
Enlisted in the war for the Union	183

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[1] The above sketch of the law school is taken from Dr. Hough's Historical and Ststistical Record, page 195.

HOBART COLLEGE, 1825.

[Furnished by President Potter.]

The movement which led to the establishment of Hobart College may be traced to the year 1811, when Trinity Church, New York, promised to the academy at Fairfield, N. Y., an annual grant of $500, on condition that the trustees of the academy should give the principal $550 a year and should allow him to instruct four divinity scholars free of charges for tuition. This grant was soon increased to $750 a year and the number of divinity scholars to eight. The principal appointed under this agreement united the duties of rector in the Fairfield church, head of the academy, and instructor in theology to the divinity students, and for six years there seems to have been no plan conceived for providing the Episcopal clergy in western New York with a more liberal education than they could receive in the Fairfield school. In 1817, however, the Rev. Dr. McDonald was appointed to the principalship. He brought with him a lively sense of the dangers to which a church is exposed by want of learning in its ministry and a very strong resolve to do something toward the establishment in western New York of a college and theological school for the Episcopal Church.

He and Bishop Hobart were firmly united in this purpose, and soon matured a plan for its fulfillment. In 1821 the grant of Trinity Church was transferred to the Geneva Academy, Geneva, N. Y., on condition that the people of Geneva should erect a suitable building for the accommodation of the theological students; and the subscription paper then circulated states that the money from Trinity Church was to be given "with the intent to use all practical means to raise the academy to the highly useful station of a college." In 1822 the trustees of the academy thought themselves justified in asking the regents of the University of the State of New York for a college charter, to be ranted after three years, provided that within that period sufficient permanent funds should be obtained to insure the efficiency of the institution. The regents granted the request by conferring, April 10, 1822, a provisional charter, and on the 8th of February, 1825, the formal charter of Geneva College was issued.

The institution thus created represented two distinct interests—the Episcopal Church and the people of Geneva and its vicinity. The church was of course chiefly desirous that the college should give students an adequate preparation for the theological school, which it was proposed to connect with the college; the people of Geneva were glad to have among them a place at which a liberal education could be conveniently obtained. The good of both parties plainly required nothing more than a well ordered curriculum and good teachers, but jealousies were aroused by certain points of administration, and the conciliation of the divisions thus created was a delicate task.

It was due to Dr. McDonald, who seems to have been a man of great skill in managing the details of business, that the college had any success at all in its earliest years. He was for a year the acting president, and was professor of Greek and Latin until his death in 1830.

The purpose of Dr. McDonald and Bishop Hobart was to establish a theological seminary in connection with the college, but though such a seminary was formally organized in 1821 it was never successful, and came to an end after a few years.

In spite of its close connection with the Episcopal Church (over two-fifths of its endowments came from funds for the increase and education of the ministry of that church) Geneva College was very far from being a mere training school for the ministry. Indeed, it went further than any college of its day in attempting to provide for the needs of young men who did not intend to enter any of the so-called learned professions. In a circular published in 1824, the outlines of a proposed "English course" are given—a course, as the circular states, "in direct reference to the actual business of life, by which the agriculturist, the mechanic, and the merchant may receive a practical knowledge of what genius and experience have discovered, without passing through a tedious course of classical studies."

The first president was the Rev. Jasper Adams, D. D., elected in 1826, who held the position only until April, 1828.

Dr. McDonald, as has been said, became the first professor of Greek and Latin; and the first professor of mathematics and natural philosophy was Horace Webster, LL. D., afterwards president of the College of the City of New York. Professor Webster held his position for twenty-three years, and by his learning, his diligence, and his generous devotion he helped to support the college through the times of its greatest weakness. In the first faculty there were also a professor of French and a tutor.

The second president was the Rev. Richard S. Mason, D. D. During Dr. Mason's presidency (in 1834) a medical school was established in connection with the college. This school obtained a high rank in its day and had several physicians of note in its faculty, among them Dr. C. A. Lee and the elder Dr. Austin Flint. In 1873 the school was transferred to Syracuse University in order to secure the clinical advantages presented in Syracuse.

In 1836, on the resignation of Dr. Mason, the Rev. Benjamin Hale, D. D., was elected to the presidency. It was under Dr. Hale that the college was first really assured of permanent existence and efficiency. When he became president he found the college still weakened by the suspicion and jealousy between the secular and ecclesiastical elements of its government; the endowment funds, small at best, in much confusion, and the work of the college ill directed. When he retired, at the end of twenty-three years, he left an endow-

HOBART COLLEGE.

ment largely increased and well invested, an organized faculty, and a strong body of friends and supporters of the college.

Much of this addition to the wealth of the college was due to the generosity and self-sacrifice of Dr. Hale himself. Indeed, the history of Geneva College is a record of the quiet devotion of a few self-denying men, who gave their energies, their abilities, their chances of preferment, and the best years of their lives to keep it from extinction.

It was in 1851, during the presidency of Dr. Hale, that Trinity Church, influenced chiefly by the solicitations of Bishop De Lancey, decided to add a considerable amount to the permanent funds. There were several conditions attached to this grant, one of which was that the name of the college should be changed to Hobart Free College, in commemoration of Bishop Hobart, to whose labors the foundation of the college was in great measure due.

In 1858 the Rev. Abner Jackson, D. D., LL. D., succeeded Dr. Hale. During Dr. Jackson's administration (in 1860) the name of the college was changed from Hobart Free College to Hobart College. Dr. Jackson resigned in 1867 to become president of Trinity College, Hartford, and after a year, during which the senior professor, the Rev. Dr. W. D. Wilson acted as president, the Rev. James Kent Stone, D. D., was elected. He held the position only one year, and was succeeded by the Rev. James Rankine, D. D., whose term lasted from 1869 to 1871. The Rev. Maunsell Van Rensselaer, D. D., LL. D., filled the office from 1871 to 1876, and was followed by the Rev. W. S. Perry, D. D., LL. D., who was president only two months, resigning the position to become bishop of Iowa. He was followed by the Rev. Robert Graham Hinsdale, D. D. (1876–1883), and after a year, during which the senior professor, H. L. Smith, LL. D., was acting president, the Rev. E. N. Potter, S. T. D., LL. D., D. C. L., was elected. During Dr. Potter's presidency the value of the college real estate was very nearly doubled, chiefly by the erection of several new buildings. Among these the most important is the new library erected in 1885–86. There are now 22,000 volumes on the shelves, and the college is accordingly provided with a good working library. There are also a chemical laboratory sufficient for all the operations in elementary qualitative and quantitative analysis, a well-arranged geological museum, and a good collection of mathematical and astronomical instruments, including an equatorial telescope with a focal length of 10 feet and an aperture of nearly 9 inches.

In 1889 the total wealth of the college was $460,612.48 (no debt), its revenue from all sources $24,723.28, its expenditures $25,000.48, of which $14,602.41 was for salaries and $5,497.59 for prizes, scholarships, and beneficiary aid. The number of students was 76, of permanent instructors 9, of lecturers 3.

In 1897 the Rev. R. E. Jones succeeded to the presidency.

NOTABLE TEACHERS.

No account of Hobart College would be complete without some mention of several of its teachers. Dr. McDonald and Professor Webster have already been spoken of. Gen. Joseph Gardner Swift, the noted engineer, so well known as the first graduate of the United States Military Academy, was professor of political economy and civil engineering from 1831 to 1845. For one year only, 1848–49, the college enjoyed the services of another able engineer, David Bates Douglass, LL. D., at one time the president of Kenyon College. The Rev. W. D. Wilson, D. D., LL. D., L. H. D., so long the honored and reverenced dean of Cornell University, was professor of moral and intellectual philosophy from 1850 to 1868, when he became professor of philosophy at Cornell. Besides all these there is Prof. Hamilton Lamphere Smith, LL. D., who since 1868 has been professor of natural philosophy and astronomy, having come to Hobar from Kenyon College, Ohio. Professor Smith's contributions to the advancement of science, and in particular his work on the diatomaceæ, have a permanent value, while his generous enthusiasm and his unselfish kindness make him beloved as well as honored.

THE CLASSICAL COURSE.

The development of the classical course of study has been much the same at Hobart College as at other colleges of equal age and standing. When the college was opened, the age of a student at entrance was about 15. He had to pass examination in arithmetic and grammar, in about as much Latin as is now required, and in simple Greek prose, including the four gospels in Greek. Then, in his freshman year, he finished his arithmetic and grammar, made his first acquaintance with Greek poetry, and read Virgil's Georgics, some Livy, and Sallust. Afterwards he made his way through the elegant extracts in "Græca Majora," read three books of Homer's Iliad in his junior year, and in his senior year studied Cicero de Oratore, the first volume of Stewart's Philosophy, mechanics, hydrostatics, hydrodynamics, magnetism, electricity, optics, astronomy, Kames's Criticism, Butler's Analogy, chemistry, mineralogy and geology, Stewart's History of Moral and Political Philosophy, political economy, Constitution of the United States and Chancellor Kent's Law Lectures, Rutherford's Institutes, Juvenal and Persius, and the Greek Testament. Indeed, the study of the Testament occupied an hour a week throughout the course, and the close connection between the college and the church is shown by the fact that St. Augustine's De Civitate Dei was read during the junior year.

At the present time the age at entrance has increased from 15 to 17 or 18; the Homer formerly read in the junior year is read in the fitting school, an acquaintance with a few English classics is required for admission, and the algebra, geometry, and geography formerly

HOBART COLLEGE—GYMNASIUM, OBSERVATORY, LIBRARY.

studied in college are now expected at entrance. In the college course the Greek Testament and St. Augustine are no longer read. The work in Greek and Latin is so arranged that a student has the opportunity of becoming acquainted at first hand with nearly all the great classical authors. The course in English is so planned that every graduate will have the power, so far as teaching can give it, of writing correct and straightforward English, and will have made a critical study of several plays of Shakespeare and a good part of the Canterbury Tales, besides gaining from his personal readings a gentleman's knowledge of English literature. Elementary German and French have been added to the required work, and the study of science has been made less general and more thorough. Mathematics are carried no further than formerly, but the calculus, which was part of the junior work, is now taken up in the sophomore year. In brief, a large amount of work in Greek, English, French, and German has been added to the old course, while in other departments the character of the teaching has become, so to speak, less scholastic and more academic than it was fifty years ago.

THE ENGLISH OR SCIENTIFIC COURSE.

Mention has been made of an English course which was devised at the opening of the college. The circular in which the plan of this course is set forth is so interesting that it has been thought well to print it in part:

That the blessings of civil liberty—real blessings only when shared among all ranks of people—may be extended as far as possible and continued as long as possible, a general diffusion of useful knowledge seems indispensably necessary.

* * * * * * *

There is another light in which the diffusion of knowledge may be received as of the highest importance to the community at large. It is where practical information is communicated to citizens in all stations of life, enabling them to add pleasure to business and extend their exertions for the means of domestic comfort into fields of research hitherto confined to the philosopher.

For these reasons it is proposed, should the plan receive the approbation of the honorable the regents of the university, to institute in the Geneva College, besides the regular course of study pursued in similar institutions, a totally distinct course, in direct reference to the practical business of life, by which the agriculturist, the merchant, and the mechanic may receive a practical knowledge of what genius and experience have discovered, without passing through a tedious course of classical studies.

Students of certain qualifications and age shall be admitted members of the college, with all the privileges of it, to pursue a full course of the following studies under the appointed instructors:

1. Under the English professor they shall study the philosophy of English grammar, geography, rhetoric, history, etc.

2. Under the professor of mathematics they shall study geometry, trigonometry, land surveying, theoretical and practical; mensuration, generally, etc.

3. Under the professor of chemistry shall be studied chemistry, the principles of dyeing, bleaching, etc.

4. This course of study shall consume at least two years, and the students shall be classed by years, as in the classical departments of the college.

5. Students pursuing this course shall be subject to the same number of public examinations in every year as are the classical students, and shall equally conform to all the by-laws of the college.

6. Upon the expiration of the prescribed term of study such students in this minor course as shall appear, upon public examination, to merit it, shall receive from the president on commencement day, if the president be so authorized by the honorable the regents of the university, an English diploma.

This paper, which is probably the work of Dr. McDonald, is remarkable for two things: First, for its real breadth of view in perceiving that technical training need not be illiberal, and secondly, for its misconception of the resources needed in the successful institution of what would have been practically a school of technology.

Technical education costs more for apparatus and teachers than any other kind of instruction, and the original purposes of the English course could not have been reached without a great deal of money. As the money was not obtained, the English course included from the first hardly anything more than what was left of the classical course after omitting the Greek and Latin. In the beginning it required three years for completion, and added a little work in French. From 1854 to 1875 it was offered as a two years' course, but demanded so much more than formerly for admission that it was practically unchanged in character. Since 1875 the course has taken three years. Up to 1886 it was known sometimes as the English course, more often as the scientific course, not a misleading name so long as the subsidiary portions of the classical course were in the main scientific, however elementary. As the character of the classical course has been changed, the character and the name of the English course have been correspondingly modified. At present the course is called the literary course, and the diploma carries the degree of bachelor of letters. The requirements for entrance include an elementary knowledge of French and German.

STATISTICS OF ALUMNI.

In 1889 there had been 624 persons graduated from the college. They may be classified by professions as follows:

Clergymen	164
Lawyers	180
Physicians	68
Teachers	60
Civil engineers	14
In other employments	138

Nearly all of the graduates have attained positions of respectability, and not a few have become eminent in their different callings.

Six of the clerical graduates have been consecrated as bishops in

the Protestant Episcopal Church. They are the Rt. Rev. Henry Adams Neely, D. D., bishop of Maine (class of 1849); Rt. Rev. William Paret, D. D., LL. D., bishop of Maryland (1849); Rt. Rev. Edward Randolph Welles, D. D., of Wisconsin (1850); Rt. Rev. George Worthington, S. T. D., LL. D., of Nebraska (1860); Rt. Rev. Leigh Richmond Brewer, S. T. D., of Montana (1863), and the Rt. Rev. Anson Rogers Graves, bishop of the Missionary District of the Platte (1866). The Rt. Rev. Mahlon N. Gilbert, D. D., assistant bishop of Minnesota, though not a graduate, was for some years a student at Hobart College.

The Rt. Rev. Charles Edward Cheney, bishop in the Reformed Episcopal Church, was graduated in 1857.

Among the lawyers graduated at the college, the first place may rightly be given to Charles James Folger, of the class of 1836. He studied law in Canandaigua, N. Y., was admitted to the bar in 1839, and soon acquired a good practice in Geneva. He was made chief judge of the court of appeals by appointment and afterwards by election, 1880–1881; then Secretary of the Treasury of the United States from October 27, 1881, to September 4, 1884, the day of his death. In 1882 he was nominated by the New York State Republican convention for governor, but was defeated by Grover Cleveland by a majority of nearly 200,000. The stir of politics, the control of great interests, the exhilaration of opposition made public life interesting to Secretary Folger. To all the positions he filled, whether administrative or judicial, he brought a conservative judgment, a widely informed mind, and a devotion to duty which amounted to enthusiasm. No stain ever rested upon his honor and no meanness was ever laid to his charge, and when he died men of all stations and every occupation came to do honor to the memory of one who was the friend of all.

Gen. Albert James Myer, of the class of 1847, became well known as the Chief Signal Officer of the United States Army. While on duty in Texas, in the United States Army, he devised a system of signaling, with flags and torches, by which messages could be sent as accurately and fully, though not so rapidly, as by the electric telegraph. In 1860 he was commissioned major and made Chief Signal Officer of the Army. His appointment as Chief Signal Officer was revoked July 21, 1864, but he was brevetted brigadier-general March 13, 1865. He was reappointed colonel and Chief Signal Officer in 1866. By an act of Congress approved February 9, 1870, provision was made for taking meteorological observations at certain military stations, and for giving notice on the Northern Lakes and seaboard of the approach and force of storms. To the superintendence of this work General Myer was appointed, and at 7.35 a. m. November 1, 1870, "the first systematized simultaneous meterological observations taken in the United States were read from the instrument at twenty-four stations

and placed on the telegraphic wires for transmission." The development of the Weather Bureau under General Myer is too well known to need recounting. He was commissioned brigadier-general in June, 1880, and died on the 24th of August in the same year.

Other distinguished graduates are: William Watts Folwell, LL. D., of the class of 1857, afterwards president of the University of Minnesota; the Rev. George Williamson Smith, D. D., LL. D., also class of 1857, president of Trinity College, Hartford; Henry Hobart Bates, examiner in chief of the board of appeals in the Patent Office, and Clarence Armstrong Seward, class of 1848, for more than twenty-five years a member of one of the largest and most prominent law firms of New York City.

The best general account of the history of the college down to 1876 is contained in the history of Ontario County, N. Y., published by Everts, Ensign & Everts, Philadelphia. A memoir of President Hale, by the Rev. Malcolm Douglass, was published in Claremont, N. H., by the Claremont Manufacturing Company. The numbers of the Hobart Herald (the local college paper) for October 26, November 18, and December 19, 1885, for October, 1886, and for November, 1887, contain details of interest and importance.

All these books and pamphlets are in the college library. A complete set of the prospectuses published by the college and of the catalogues (the first catalogue was published in 1837) is also in the library.

BIBLIOGRAPHY OF HOBART COLLEGE.

[Prepared in 1891 by Philip N. Nicholas, Secretary of Board of Trustees.]

I.

Conditional charter granted by regents of the University of the State of New York April 10, 1822. Charter granted by regents of the University of the State of New York February 8, 1825. Recorded in Book of Deeds No. 41, page 357, etc., April 14, 1825.
Charter amended April 10, 1855.
Charter amended February 5, 1863.
Charter amended June 13, 1890.
Name changed by regents to Hobart College March 27, 1860.

STATUTES RELATING TO HOBART COLLEGE.

Chapter 309, Laws 1831, authorizes college to employ part of its funds in purchase of lot and buildings. Chapter 237, Laws 1838, relating to United States deposit fund. Chapter 211, Laws 1852, name changed to Hobart Free College. Chapter 247, Laws 1855, relating to quorum of board. Chapter 542, Laws 1857, relating to appropriation ($3,000). Chapter 52, Laws 1861, change of name by regents ratified and acts of regents confirmed. Chapter 21, Laws 1874, relating to constitution and election of the board of trustees.

II.

The regents' reports contain the annual statements made by the college.

III.

1. History of Hobart College to 1876, prepared by the Right Rev. W. S. Perry, D. D., etc., bishop of Iowa, the president of the college, for the History of Ontario County, New York, published by Everts, Ensign & Everts, of Philadelphia, Pa.

   An elaborate sketch, and in the main satisfactory. It is especially valuable for its citations of original documents in the possession of the college in manuscript.

2. Brigham's Geneva, Seneca Falls, and Waterloo Directory for 1862. Contains a short history of the college, prepared by the Rev. Abner Jackson, D. D., etc., then president of the college. It is part of Mrs. S. H. Bradford's History of Geneva.

3. A brief history of the college, sent to the Johns Hopkins University during the academic year 1889–90.

   This sketch is not as full as the Perry history (No. 1), but emphasizes certain points which that history passed over lightly. It was prepared under the direction of the faculty.

4. The general statement which introduces the annual catalogue of the college for 1890–91 is a very satisfactory sketch, presenting clearly and briefly the leading facts in the history of the college.

5. Sundry pamphlets. One of the most valuable is entitled College Memoranda, 1868, and was prepared by the late Thomas D. Burrall, of Geneva.

IV.

1. A memoir of President Hale, prepared by the Rev. Malcolm Douglass, published in Claremont, N. H., covers particularly 1836 to 1858.
2. An interesting and valuable memoir of the Rev. Daniel McDonald, D. D., first acting president of the college, will be found in Sprague's Annals of the American Pulpit, Vol. V.
3. A very brief sketch of President Hale is contained in Appleton's Encyclopedia of Biography.
4. The Rev. Abner Jackson, D. D., etc., once president. A memorial address by the Rev. William Payne, D. D., Hartford, 1874.
5. David Bates Douglass, LL. D., professor of mathematics, Geneva College. A memorial address by the Rev. Benjamin Hale, D. D., Geneva, 1850.
6. The Rev. Kendrick Metcalf, D. D., late professor and librarian in Hobart College. A memorial sermon by the Rev. James A. Bolles, D. D., Geneva, 1873.
7. A memorial of Louis Sanford Schuyler, priest. 12°. New York, 1879.
8. The Hon. Charles James Folger, LL. D. A memorial address by the Hon. Charles Andrews. Geneva, 1885.
9. The Hon. Horatio Seymour, LL. D. A memorial address by the Hon. Delans C. Calvin, LL. D. Geneva, 1886.

   Of the above memorials Nos. 1, 2, and 3 are specially valuable.

V.

1. The annual catalogues published by the college (date of first, 1837) contain much historical matter.

   The one for 1890-91 is particularly valuable.

2. The Hobart Herald, college monthly, has details of more or less interest in all its numbers; volumes VII and VIII in particular, under the caption "College Memoranda," contain matter of interest and importance.
3. The Sentinel, 1872–73, the college monthly which preceded the Hobart Herald, contains some historical material.
4. The Echo of the Seneca, college annual, which began in 1857, is devoted specially to student life, organizations, classes, societies, etc.

   All works named above are in the Hobart College library.

VI.

BIOGRAPHICAL MEMORANDA.

Appleton's American Biography contains sketches of the following Hobart College alumni:

Name.	Class.
Right Rev. Henry Adams Seely, D. D., Maine	1849
Right Rev. William Paret, D. D., LL. D., Maryland	1849
Right Rev. Edward Randolph Welles, D. D., Wisconsin	1850
Right Rev. George Worthington, S. T. D., LL. D., Nebraska	1860
Right Rev. Leigh Richmond Brewer, S. T. D., Montana	1863
Right Rev. Mahlon N. Gilbert, D. D., assistant, Minnesota	
Right Rev. Charles Edward Cheney, D. D. (Reformed Episcopal Church)	1857
Hon. George Woodruff	1829
Rev. Philemon Halsted Fowler, D. D	1832
Hon. Peter Wyndot Dox	1833
Hon. James Rood Doolittle	1834
Hon. Fredric Solon Lowell	1835
Hon. Charles James Folger	1836
Rev. John Nicholas Norton, D. D	1842
Edward Floyd De Lancy, Esq	1843
Prof. Thomas Fortescue Rochester, M. D., LL. D	1845
Gen. Albert James Myer, M. D., LL. D	1847
Charles Nathaniel Hewitt, M. D	1856
Prof. William Watts Folwell, LL. D	1857
Rev. George Williamson Smith, D. D., LL. D., President Trinity College	1857

Sketch in the University Magazine, May, 1890, of the Hon. Clarence Armstrong Seward, LL. D., New York, class of 1848.

A brief biography of the Rev. Eliphalet Nott Potter, D. D., etc., president of the college, appeared in the University Magazine, March, 1890.

Other prominent alumni of Hobart College, academic department:

Name.	Class.
Rev. William Thomas Gibson, D. D., editor Church Eclectic	1842
Charles Cameron Clarke, Briar Cliff, N. Y	1844
Rev. Prof. Joseph Morison Clarke, D. D	1847
Rev. William Azur Matson, D. D	1843
Abel Seymour Baldwin, M. D	1834
Prof. Theodore Sterling	1848
Mortimer William Belshaw	1850
Prof. Albert Sproul Wheeler, New Haven	1851
Henry Hobart Bates, Ph. D., Patent Office	1854
Rev. Prof. Edward Hart Jewitt, D. D., M. D., New York	1855
Hon. Charles Edward Parker, judge	1857
Henry Ebenezer Henderson, M. D	1858
Prof. Charles Delamater Vail, Hobart College Librarian	1858
Col. Charles Jefferson Wright	1861
Hon. Henry Richard Watson	1862
Prof. Charles Jacobus	1864
Rev. Henry Roswell Lockwood, D. D	1864
Beverly Chew, New York	1869
Rev. Cameron Mann, D. D	1870
Rev. Wm. Mortimer Hughes, D. D	1871
Prof. Herbert Morison Clarke	1876
Prof. Charles John Rose	1876
James Milnor Coit, Ph. D	1865

VII.

A complete collection of books and pamphlets illustrating the history of the college is preparing for the library of the University of the State of New York. (New York State Library.)

Complete sets of the annual catalogues will be found also in the Astor Library, the Boston Public Library, and the Yale University library.

A file of the Hobart Herald will be found in the Yale University library, also a copy of the Perry History of Hobart College.

HISTORY OF NEW YORK UNIVERSITY.

[Furnished by Chancellor MacCracken.]

New York University, Henry M. MacCracken, D. D., LL. D., Chancellor—University College—University Law School—University Medical College—School of Pedagogy.

The concept of New York University first took written shape in the minutes of a meeting of nine gentlemen on the 16th day of December, 1829. Fortunately, the record of this meeting, in the handwriting of John Delafield, who was one of the nine, and who became the first secretary of the university, is preserved; also the minutes of later meetings of these same gentlemen in the same month.

These minutes are as follows (the streets and numbers are retained as showing where leading citizens lived seventy years ago):

A meeting was convened on the 16th Dec., 1829, at which the following gentlemen were present: Rev. J. M. Mathews, 93 Liberty; Rev. J. M. Wainwright, 1 Rector; Dr. Jno. Aug. Smith, 8 Park place; Dr. Valentine Mott, 75 Park place; John Delafield, 30 Varick; Joseph Delafield, 16 Park place; Hugh Maxwell, 94 Houston; I. S. Hone, 66 Greenwich; M. Van Schaick, 335 Broadway.

The establishment of a university in the city of New York on a liberal and extensive scale was discussed, and various views taken as to the want of such an establishment and the probable feeling of the public in relation thereto. It seemed to be unanimously conceded that such means of education as a liberal and extensive university might offer were greatly wanted and desired, and it was believed that public sentiment and patronage would aid in building up so great an object. It was then proposed that the literary and scientific institutions of our city should be invited to send delegates to a meeting hereafter to be convened to take into farther consideration the desirableness of such an institution as that contemplated. The proposition having been adopted by the meeting, it was adjourned till Wednesday, the 23rd Dec.

Wednesday, Dec. 23rd, 1829.—At a meeting convened this day, by adjournment on Wednesday last, present: Rev. Dr. Mathews, Rev. Dr. Wainwright, Dr. J. A. Smith, H. Maxwell, John Delafield, Joseph Delafield, I. S. Hone. John Delafield reported that the N. Y. Athenæum had appointed a committee of conference consisting of Professor Renwich, Columbia College; John Delafield, Francis Olmsted, 6 Broadway.

Mr. Delafield further reported the N. Y. Historical Society had appointed a committee of conference, viz, Dr. Wainwright, W. Beach Lawrence, John Delafield.

Mr. Joseph Delafield reported that the N. Y. Lyceum had appointed a committee of conference, viz, Joseph Delafield, Dr. Jno. Aug. Smith, and O. M. Lownds.

The high schools, public schools, and Mechanics' Institute were not yet heard from. After much discussion and interchange of opinion, it was agreed to nominate and invite a number of citizens to meet the delegates from the several societies at a meeting to be hereafter convened. The following gentlemen were nominated and agreed on for invitation. [Here followed thirty-eight names.] The meeting then adjourned to meet on Wednesday, the 30th inst.

Wednesday, 30 Dec., 1829.—Pursuant to adjournment, a meeting was held this day; present, Rev. Dr. Mathews, Rev. Dr. Wainwright, M. Van Schaick, H. Maxwell, Dr. J. A. Smith, and J. Delafield.

Dr. Broadhead and Mr. W. B. Lawrence, from the high school, attended this meeting. Dr. Broadhead reported that the high school had appointed a committee of conference, viz, Dr. Broadhead, D. Th. Cook, Wm. Beach Lawrence.

A further discussion of the project was had, and exchange of opinions. It was

then agreed to organize this meeting by the appointment of a chairman and secretary, when Dr. Mathews was appointed chairman, and John Delafield secretary. It was then

Resolved, That a meeting of the citizens and delegates be convened on Wednesday, the 6 day of January next, at 7 o'clock in the evening.

The names of the several delegates and of the gentlemen nominated at the last meeting to be invited were then called over and confirmed.

The chairman and secretary were instructed to give the necessary invitation to the parties named to meet at the Historical Society rooms (the society having offered their rooms for the purpose).

The chairman and secretary were instructed and authorized to do all that might be deemed requisite by them in relation to the meeting on Wednesday, the 6th instant. Adjourned.

The trustees of the public schools having appointed the following gentlemen as delegates, they were severally invited to attend the meeting, viz, Robert Sedgwick, 78 Warren; Benjamin Clark, 330 Pearl; B. L. Swan, Broadway; Samuel Demilt, 239 Pearl; Robert C. Cornell, 119 Hudson; Samuel F. Mott, 50 Beekman.

The Mechanics' Institute appointed the following delegates, who were also invited: Thomas R. Mercein, 5 Laight, and Martin E. Thompson, White street.

The following invitation was addressed to each of the aforenamed gentlemen:

SIR: The establishment of a university in this city on a liberal and extensive foundation has for some time past occupied the attention of many of our respectable citizens. At a meeting held for considering the subject it was determined to invite your attendance on Wednesday next at 7 o'clock p. m., at the rooms of the Historical Society, to take into further consideration the desirableness of such an institution as that contemplated, and to adopt such measures in relation to it as may be deemed most expedient. It is earnestly hoped that you may be able to attend.

J. M. MATHEWS.
J. M. WAINWRIGHT.
J. AUGUSTINE SMITH.
VALENTINE MOTT.
JOSEPH DELAFIELD.
MYNDERT VAN SCHAICK.
HUGH MAXWELL.
ISAAC S. HONE.
JOHN DELAFIELD.

NEW YORK, *January 4, 1830.*

The minutes of this invited meeting are preserved, and are as follows:

At a meeting of a number of citizens on the evening of the 6th January, 1830, at the rooms of the Historical Society, convened for the purpose of considering the expediency of establishing an university in the city of New York, General Morgan Lewis was appointed chairman, and Hugh Maxwell was appointed secretary.

A communication on the subject was read by Rev. Dr. Wainwright, and several gentlemen stated their views in relation to the proposed plan.

On motion of Rev. Dr. Mathews, it was resolved that it is highly desirable and

NEW YORK UNIVERSITY—OLD UNIVERSITY BUILDING, WASHINGTON SQUARE, 1831-1894.

expedient to establish in the city of New York a university on a liberal foundation, which shall correspond with the spirit and wants of our age and country, which shall be commensurate with our great and growing population, and which shall enlarge the opportunities of education for such of our youth as shall be found qualified and inclined to improve them.

On motion of Rev. Dr. Cox, it was resolved that a committee of three be appointed to publish the communication which had been submitted to the meeting, whereupon Rev. Dr. Mathews, Rev. Dr. Wainwright, Mr. John Delafield, were appointed by the chairman.

On motion of Mr. Thos. R. Mercein, it was resolved that a committee be appointed, with power to add to their number, to make proper application to the legislature for a charter, and to apply to the corporation of the city of New York for the privilege of occupying the building in the rear of the City Hall. . . .

On motion,

Resolved, That a standing committee be appointed, with power to add to their number, to take measures in relation to the establishment of the proposed university, and at their discretion to call meetings of the citizens present, and of others, in reference to the main object; whereupon the chairman, Genl. Lewis, was appointed chairman of the committee, and the following gentlemen were named: N. Dean, M. Van Schaick, O. M. Lownds, John Delafield, James Lennox, G. P. Disosway, Dr. Broadhead, Dr. Mathews, Dr. Wainwright.

On motion,

Resolved, That a committee be appointed to confer with the trustees of Columbia College in relation to the proposed university.

This standing committee accepted its appointment and began to meet the 8th of January, with Hon. Morgan Lewis as chairman, John Delafield as secretary, and Myndert Van Schaick as treasurer. They added to their numbers from time to time, and finally came to include a majority of the thirty-two gentlemen who constituted the first corporation of the university more than a year afterwards. On the 14th of January they issued a public address to citizens, over the name of their chairman, Morgan Lewis. This address unfolded their plan, the more important features of which are stated in the first three paragraphs of this printed paper, as follows:

The great object of the university shall be to extend the benefits of education in greater abundance and variety and at a cheaper rate than at present they are enjoyed, for which purpose such colleges and professorships shall be established in the university as shall hereafter be found practicable and expedient.

It shall be a fundamental principle that persons of every religious denomination shall be eligible to all offices and appointments, to the intent that the university shall not at any time be under the control or influence of any particular sect.

Every person attending the university shall be at liberty to pursue the acquisition of knowledge in the various departments of literature and science according to his own preference or that of his parent or guardian, having an unlimited choice of the branches taught in the institution.

A fortnight later an expanded statement was published, which said of the university:

It is to be a seminary of learning, concentrating within itself means of instruction, ample and well arranged, in every department of human knowledge. In process of time, and progressively, as subscriptions and donations, public and private, shall be obtained, it must have libraries of useful books for study and for

reference; apparatus for illustrating natural and experimental philosophy, including chemistry, astronomy, and the mechanical arts; cabinets for natural history; a garden for botany and experiments in horticulture and agriculture; and in the department of fine arts books, models, casts for drawing in architecture, engineering, surveying, machinery, and natural history. Able professors and teachers will also be required in languages, ancient and modern; mathematics, pure and applied; philosophy, natural, intellectual, and moral; history and geography, ancient and modern; political economy; politics; commerce; the law of nations and constitutional law; geology and mineralogy; botany and zoology; physiology and comparative anatomy; civil engineering and architecture; agricultural chemistry and chemistry applied to the arts; the laws of perspective and the principles of drawing and designing.

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We do not anticipate the possibility of carrying out into detailed operation the whole of the above suggestions in a year, and perhaps not in a generation, but we do look forward with sanguine expectation to a successful beginning.

The committee on conference with the city government applied at once for the use of the building in the rear of the city hall which was known as the almshouse. They found, however, within thirty days, February 1, 1830, a competitor for the use of this building in Columbia College. The latter submitted a paper to the mayor which is of interest as showing the value at that time of the property held for college work in New York City:

Propositions to the corporation of the city of New York which have received the approbation of all the trustees of Columbia College: That if the corporation of the city should patronage Columbia College as the city college, the trustees pledge themselves to ordain that the mayor and recorder shall be ex officio members of the board of trustees of the college, and that for every $20,000 in money or in real estate granted or conveyed to the said trustees for the use of the college by any individuals or any society or body corporate in the said city the corporation shall have the right to appoint one trustee of the said college until the number of trustees so appointed shall equal, with the mayor and recorder, the present number of the trustees.

The present number of trustees, agreeably to the charter, is	24
Value of the property of the college obtained from Trinity Church, at least	$400,000
Value of a trusteeship (400,000 divided by 24), say	20,000
Value of the almshouse and the ground on which it stands	200,000
Number of trustees to which the corporation of the city will be entitled in case of the grant of the almshouse or an equivalent thereto ($200,000 divided by 20,000), say	10
Add mayor and recorder	2
Total trustees under the above arrangement	12

If other funds be contributed by the corporation or the citizens, the number of trustees so appointed by the corporation will be increased.

The university, failing to obtain the temporary use of the city's building, took up its first abode in its "own hired house." This was "Clinton Hall," situated in Bleecker street, not far from Broadway. This independence of the city government which the university was

obliged to assume against its own preference is now seen to have been a blessing in disguise.

The committee on conference with Columbia College appointed by the invited meeting accepted their office. They reported the 5th of February to the standing committee that—

They have held a meeting with a committee from the college, and that after an interchange of views in reference to some distinguishing features of the two institutions nothing transpired which in the opinion of the undersigned can lead to a belief that under present circumstances there is any prospect of bringing the university and the college into such an immediate union with each other as would form them into one institution, under a common head and government; although it is hoped they may both proceed with mutual good will and honorable emulation in promoting the common cause of education and literature.[1]

[1] The writer [Chancellor MacCracken], in a speech before the Nineteenth Century Club, of New York City, Monday, April 12, 1892, discussed by special invitation the subject of "A Metropolitan University," and in the introduction spoke of the genesis of the two universities in the one city. He said:

"I have suggested that the explanation of the two foundations is found in two diverging tendencies of thought. I shall prove this from a very brief glance at the genesis of the two corporations.

"The first allusion in standard history to the university movement in New York City is in the fourth volume of Bancroft's United States. He says of New York province that although it was settled chiefly by Calvinists yet the English Church was favored by law, though not established. Then he adds, under the date 1754, the following: 'An act of the prerogative which limited the selection of the president of the provincial college to those in communion with the Church of England agitated the public mind and united the Presbyterians in distrust of the royal authority.' Come down exactly one hundred years to the year 1854, and the following view of the transaction of 1754 is from the pen of a prominent trustee of Columbia College, Mr. S. B. Ruggles, published in a pamphlet entitled The Duty of Columbia College to the Community. He is arguing for a larger liberality, especially in the admission of a certain candidate to a professorship in spite of his Unitarianism. He states the case as to the denominational restrictions placed upon Columbia College by her charter, which restrictions were removed as far as possible by the amended charter of 1787, but which nevertheless he regarded as perpetual by reason of the conditions in the deed of lands from the Trinity corporation. He says: 'The Episcopalianism of the president and the form of prayer in the college had, however, been secured not only by the charter, but by express conditions contained in the conveyance by Trinity Church of the college site. The State had, therefore, (that is, in making the new charter of 1787) neither legal right nor constitutional authority to dispense with these conditions; and for one I trust that the college will always respect, not only their legal, but their fair moral obligation, and will honestly perform them in their true intent and purpose without diminution or evasion. I hope that the president will always be an Episcopalian, and that the prescribed form of prayer may always be retained. But beyond that I contend that neither the legal nor the moral rights of Trinity Church, nor any other church, extend an inch.'

"I name, therefore, as indicating the historic position and tendency of Columbia, the charter of 1754, Bancroft's History, the deed of gift from Trinity Church, and the statement of Mr. Ruggles in 1854.

"I turn now to the genesis of the New York University. After the Revolution some effort was made at a modification of the government of Columbia, as appears from the following statement of a trustee of Columbia College published in 1830.

The year 1830 was devoted by the friends of the university to the securing of $100,000 of subscriptions and to the further development of the programme of the university. On the 29th of July, 1830, a meeting of the standing committee was convened, to which Mr. Delafield, the secretary, presented the following report:

It is with pleasure the executive committee now reports the successful issue of their labors. More than $100,000 have been subscribed or secured to the object of the institution.

The record of subscriptions indicates that the largest part of the $100,000 was obtained in subscriptions of $1,500 each, of which there were 42 in all. There were only 4 subscriptions of larger sums, which brought on an average about $3,000 each. There were a score or two of subscribers of sums less than $100, showing the popular character of the effort.

On the 31st of July the subscribers met and appointed a committee of 11 members to nominate candidates for the council or board of direction. Over 60 names were proposed to this committee, from whom were selected 32. Inasmuch as the scheme of the university forbade any religious denomination to have a majority, the church affiliations of the candidates were carefully ascertained and recorded. The following subscribers were duly chosen as incorporators on the 16th day of October, 1830:

Episcopalians 11, as follows: Jonathan M. Wainwright, James Milnor, Morgan Lewis, Albert Gallatin, John Haggerty, Samuel

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He says: 'It was in contemplation to apply to Trinity Church to release this condition (that is, the denominational condition inserted in the deed of the lands) in order to the introduction into the presidency of that eminent scholar and Presbyterian divine Dr. Mason;' but he goes on to say that the trustees decided instead of this to make John Mitchell Mason their provost (1811–1815). This proved but a temporary expedient.

"When the Revolution and the war of 1812 were past, and the completion of the canal system brought to New York new prosperity, then the movement on behalf of those not satisfied with Columbia as their educational representative took new growth, and that from so many quarters that no one can name its exact author. Nine gentlemen in 1829 called a public meeting, and this meeting, in January, 1830, issued a formal invitation to the community to unite in the founding of a new university. To compare small things with great, I would say of that date in higher education in New York what Macaulay says of the time when the Long Parliament met in 1641: 'From that day dates the corporate existence of two great parties. The distinction that was then made obvious had always existed and always must exist, for it has its origin in diversities of temper, of understanding, and of interest which are found in all societies, and which will be found till the human mind ceases to be drawn in opposite directions by the charm of habit and by the charm of novelty.' The first plank of the new university platform was that 'persons of every religious denomination shall be equally eligible to all offices and appointments in the new foundation.' This was inserted in the charter, where it still remains. The incorporators were to be elected by the subscribers of the endowment. These two planks of their platform illustrated the popular spirit and tendency of the movement. Certain consequences speedily followed. They satisfied nobody entirely. They were accused of being irreligious, because they made

Ward, jr., Fanning C. Tucker, Oliver M. Lownds, Edward Delafield, Charles G. Troup, and John Delafield; Presbyterians 9, as follows: Samuel H. Cox, Cyrus Mason, Samuel R. Betts, James Tallmadge, George Griswold, Stephen Whitney, James Lenox, John S. Crary, and Charles Starr; Reformed 7, as follows: James M. Mathews, Jacob Brodhead, Henry I. Wyckoff, Myndert Van Schaick, Martin E. Thompson, Benjamin L. Swan, and William W. Woolsey; Methodist 1, as follows: Gabriel P. Dissosway; Friend 1, as follows: Valentine Mott; Baptists 2, as follows: Spencer H. Cone and Archibald Maclay; one not specified.

Associated with them were the mayor of the city and 4 members of the common council, these 4 being elected by the subscribers in the same way with the other 32 members.

One hundred and sixty-nine subscribers were qualified to cast votes, each vote representing $100. Altogether 543 votes were cast. Not less than 500 of these were given each of above-named members, so that the choice was almost unanimous.

The council thus chosen held its first meeting October 18, 1830, and elected Mr. Albert Gallatin president and Mr. John Delafield secretary. Mr. Gallatin's name does not appear in connection with the university until this date. He resigned, after a year's service, on the 22d of October, 1831, giving the state of his health as the cause of the resignation. This was one year before the doors of the university

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no provision in the charter for religious teaching. One writer of 1830 says: 'For all that I can see, an infidel or an atheist may have access to every professorship in the institution.' But as soon as the subscribers had elected thirty-two incorporators, it was found that eight of them were parsons, namely, two Baptists, two Dutch, two Episcopalians, and two Presbyterians. Immediately the university was declared to be *too* religious. In the Evening Post of 1830 a writer exclaims: 'It was solely because Columbia was supposed to be subservient to a particular church that it was not supposed capable of satisfying the community. The new university has chosen its counsel—eight names with the prefix of reverend. I regret it as a most inauspicious circumstance. It is no answer to say that these gentlemen are of different persuasions. It is quite enough that these men are united together by the bond of particular religious sympathies.' Far removed as we are from these conflicts, we can plainly see that the spirit of the university movement was decidedly puritan, though not in any narrow sense denominational. It stood, as Columbia manfully and conscientiously stood, for a system of thought in regard to church and state and education. Each side held its view firmly and felt bound to advance it by every lawful means. The new movement was also on the side of innovation against conservatism. The first programme of the university announced elective courses open to those who did not care for classical training; also, popular instruction for non-matriculants and graduate courses for men who had gone through college. Had the founders not suffered in the financial disaster of that decade, but obtained the endowment of half a million dollars which they asked for, no doubt they would have developed these popular lines of study. They sincerely attempted them, but with only the fee of each student as compensation for the instruction, the outcome was very feeble.

"But why could not the two elements of the community have joined in 1830 in a

were open for instruction. Mr. Gallatin hardly deserves the credit for early or active service in the cause of the university given him by his biographer in the series of American Statesmen, which makes him a pioneer in the work, and says, "In response to his request abundant subscriptions in money and material were at once forthcoming." The facts upon record show that Mr. Gallatin had no part in the first efforts of the New York University, and that the first $100,000 were pledged before he entered the council. He said publicly, in October, 1830, "Lately honored with a seat in the council of the university, I have not yet had an opportunity of ascertaining the particular views of the friends of the institution."

This biography is also very defective in its account of Mr. Gallatin's resignation. It quotes a private letter in which Mr. Gallatin says, "Finding that a certain portion of the clergy had obtained the control, and that their object, though laudable, was special and quite distinct from mine, I resigned at the end of one year." But it omits to mention the issue between himself and the clergymen on the committee of organization, viz, Drs. Samuel H. Cox, Jonathan Wainright, and Chancellor Mathews. It was the then new question whether men might not have a college degree without any language save their mother tongue. Mr. Gallatin said:

No possible injury can arise from embracing the opportunity offered by the new university to make a fair experiment of what may properly be called an Eng-

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single university? The matter was talked of. In the very month when the first subscription was obtained for the new enterprise, a leading subscriber said: 'It is the object of the projectors to aggregate such institutions as exist in the city in a respectable university, of which Columbia College may become the brightest star in the constellation.' A single meeting of committees of Columbia College and of the university was held at the beginning of 1830, but without result. The following month the boards of Columbia College and the university were invited to meet the city council in regard to a fine property which some thought should be the site of a great university. It was in the rear of the present city hall. The university committee were present and stated their readiness to unite upon terms that should be equitable and practicable. The Columbia committee were not present, and the hearing was deferred until they should be heard from. On the part of interested citizens it was proposed that the common council should give the property in the rear of the city hall to the two bodies if they would unite; that the integrity of Columbia College should not be disturbed; that the university council should also remain, and that the city council, corresponding to our present aldermen, should be the controlling power over both institutions.

No traces appear of any further joint meeting of the conference committees of the two colleges. The simple fact was that Columbia could not lawfully retain its valuable property and resign the supreme control, while those represented in the university would not take less than an equal part in any metropolitan university movement which they might undertake. Nor was this for selfish or personal reasons on either side. It was, as I have said, because each championed a most valuable tendency in human thought. Possibly as to the particular plan of union proposed in 1830 they were a little timid. They were afraid of federation under the direction of the board of aldermen.

"There was no lack of extended discussion of the university question in New

lish college. Before the Reformation the way to the word of God was obstructed by the improper use of the Latin language. We now find the same impediment arresting a more general diffusion of human knowledge.

The university consented that students might enter for special courses without any language save the English, but refused to give such students a degree. Nearly a year after Mr. Gallatin's resignation a less radical proposition was made by the vice-president of the council, Judge Betts, who offered the following proposition:

The full course of study shall comprise the Greek, Latin, French, Spanish, and German languages. Students, with the assent and advice of the chancellor and professors, may be allowed an option in the study of the languages, either as to the extent to which those branches shall be pursued or the particular languages to be studied.

The council declined to organize a full college course omitting the classical languages. They thus threw away an opportunity of anticipating by more than a generation the system now practiced successfully. The position of the university in regard to college courses was not taken hastily. On the 31st of July, 1830, Dr. Mathews reported to the standing committee, as shown by their minutes, his plan of a convention of distinguished scholars and teachers who might offer advice respecting the proposed plan of the new university. He stated that he had, "during an excursion made in the last four weeks, met with officers and gentlemen connected with various learned institu-

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York at that period. The thoughtfulness of Mr. Charles Butler has placed at my command the data from which I derive these statements. I find publications on the side of the university by Academist, by Zeno, Candor, Impartiality, and by Plebs, and on the side of Columbia by Jurisconsultus, Freeholder, and Civis, and a 'Mechanic who pays taxes,' besides any number from 'Old Friends,' 'Old Subscribers,' and 'Careful Observers.' I find, as was natural, that there was quite a little stirring of feeling, not to say temper, in reference to the question whether there should be two universities or only one. Nicknames even were used. Those who wanted education centered in Columbia were called 'sectarians,' 'patricians,' 'monkish spirits with protruding horn and cloven foot,' while on the other hand the university men were named 'radicals' and 'disorganizers,' 'enemies of a high and generous system of education,' 'a designing set of Presbyterians and their dupes of other denominations.' All this irritation of feeling seems to us like the pamphlets of the time of the Long Parliament. I name them only as showing the depth of conviction which then existed. The convictions, I repeat, were allied with tendencies deep down in every large community of the Anglo-Saxon race. The existence of these tendencies is the salvation of Anglo-Saxon nations. We can not obliterate the tendencies. We ought not to obliterate them if we could. The two existing universities in New York are monuments of the two tendencies.

"I am not aware that within sixty years the fundamental conditions have particularly changed; neither conservatism nor liberalism has vanished. Trinity Church has not abrogated the conditions placed upon Columbia College. The university has not changed its charter provision forbidding any exclusion from office on account of religion.

"Absolute consolidation to-day of the two is no more possible than in 1830. In fact, it is more difficult, because every dollar which the university possesses has been given by private citizens and under the conditions that I have named."

tions and with men of high literary reputation from Europe; that he had received from them expressions of friendly feelings in relation to the proposed university." He suggested "the expediency of inviting a convention of learned and literary men from the several States of our Union at which the whole subject of education might be discussed," and Dr. Mathews, Dr. Wainright, and Mr. John Delafield were appointed a committee to call such a convention. Before the date of the meeting they added to their number Mr. Gallatin.

At this convention Mr. Gallatin advocated at length his plan of an English college alongside of the classical college. He was supported by Dr. Gallaudet, of Hartford. They were opposed by Dr. Lieber, of Boston; President Marsh, of the University of Vermont; President Patton, of Princeton, and President Mason, of Hobart College. The university seems to have followed the advice of the majority.

Other conspicuous participants in this convention were Jared Sparks, Professor Silliman, George Bancroft, Theodore D. Woolsey, with several scholars educated at continental universities. Mr. Bancroft's address argued affirmatively the question, "Whether the country in its present condition demands a university, and whether any responsibility rests upon New York with relation to it."

This convention, which continued in session from Wednesday to Saturday, the 23d of October, 1830, quickened the energies of the university council. Twenty-six members attended the council the following Saturday and appointed as the committee on the plan of university organization Drs. Wainwright and Mathews, Albert Gallatin, William Seaman, James Lenox, James Tallmadge, and Samuel H. Cox. This committee were thoroughly agreed upon the establishment of a graduate or university school which should enroll not only matriculants as candidates for honors, but also "attending members," and, second, that the undergraduate college students should be given wide election among the courses offered, but the bachelor's diploma was reserved for those who completed "a full classical, philosophical, and mathematical course." Among the proposed professorships in the graduate school one was to comprise "the philosophy of education and the instruction of teachers." The proposed professorships anticipated largely what is now required for the six New York university schools, namely, the college, the graduate school, the schools of pedagogy, engineering, law, and medicine. In the spring of 1832 an optimistic view of the resources of the university stated, "The university has now on hand a capital of about $40,000, with a subscription of about $50,000 more, that may be considered as good." Dr. Cox proposed that $25,000 be counted as endowment to yield $1,500; that $2,000 be raised by annual subscription; that $5,000 be expected from classical students, and $2,500 from nonclassical, and that on this prospect of $11,000 or a little more the work of instruction should be begun. This estimate allowed an

expenditure of $75,000 for grounds and buildings. Accordingly, on the 2d day of October Chancellor Mathews reported that "the chancellor and professors were inaugurated on Wednesday last, and the institution is now opened with the most flattering prospects." The list of professors and lecturers adopted at this meeting was as follows: John Mulligan, Latin and Greek languages; Henry P. Tappan, intellectual and moral philosophy and belles lettres; S. F. B. Morse, the history of art; Edward Robinson, Greek and oriental languages; William Enenpeutch, German language and literature; George Bush, adjunct, Hebrew language and literature; Miguel Cabrera de Navares, Spanish language and literature; Lorenzo L. Da Ponte, Italian language and literature; Charles Parmantier, French language and literature; Henry Bostwick, lecturer on history, geography, and chronology; Francis Lieber, lecturer on commerce, agriculture, and the mechanic arts; Samuel H. Cox, lecturer on moral philosophy; Henry Vethake, lecturer on history; Charles P. McIlvaine, lecturer on sacred antiquities; David B. Douglass, lecturer on physical astronomy; John Torrey, lecturer on chemistry.

The impartial student of the university history of this day must be impressed with the thought that the three years of preliminary work from December 16, 1829, to October, 1832, had been most prudent, farseeing, thorough, and liberal. The scholars and thinkers had done their part well. Also the men of business and wealth on the board made large plans in regard to material things.

The council in their application for a charter named $250,000 as the sum required for an effective beginning. Five hundred thousand dollars endowment was expected within a short time. They judged that a great building would attract great endowments. Except for the financial calamities which befell New York City and the entire country, their hopes would probably have been realized. General Tallmadge, the president of the council, at the university commencement, 1839, spoke as follows:

> The bold attempt to rear this noble edifice by private benefactions met with repeated discouragements, and finally suffered the common and unparalleled embarrassments of 1835, 1836, and 1837—the great fire and the commercial revulsions. Pecuniary embarrassments are often the fruitful source of mischief. The university has had its share of calamities springing from this source.

With a subscription of about $100,000 they undertook to secure grounds and buildings costing over twice that amount. There was an entire lack of productive endowment and a constant succession of annual deficits. While a few earnest friends of the university were constant in their liberality, their gifts barely supported the undergraduate work. They were not upon a scale to enable the council to carry out its original programme of university instruction.

The first result, therefore, of the poverty of the university was the relinquishment of graduate instruction in arts and science. Without

endowed professorships and fellowships, the work planned on so handsome a scale could not be begun. There seems to have been for a time certain courses in "the first general department," but only for "attending members," whose sole duties were to pay their fees and to keep good order. No student appeared on the early records as completing any graduate work for the master's degree or for other "honors."

The spirit of a university faculty nevertheless pervaded many of the professors. Very notable achievements were made in the other fields assigned to the first general department, namely, scientific and scholarly research and "the diffusion of knowledge."

Within ten years of the founding of the university two notable inventions were perfected within the walls of the new building by two professors of the faculty of arts and science. The popular verdict has long since confirmed the claims of these men, which it seems fitting to give here in their own words.

Prof. Samuel F. B. Morse, upon the 30th of June, 1853, said to the university alumni:

> Your Philomathean Hall—that room of the university—was the birthplace of the recording telegraph. The credit of my invention does pertain to your alma mater, and if this fact adds character and name to our institution, I shall experience a higher gratification than any personal deference that has been or can be bestowed upon me by foreign nations or my own countrymen.

The first public telegram was sent over wires in the university building. It is still in existence and was exhibited by the university at Chicago in 1893.

Dr. John W. Draper, under date of March 6, 1873, wrote to Scribner's Monthly as follows:

> As to the photographic portrait from the life, it was I who took the first, and that not merely in America. At that time photographic portraiture was considered in Europe to be an impracticable thing, and when the difficulties were overcome the credit of the success was given to me. (See Edinburgh Review, January, 1843, p. 339.)

This first photographic portrait from life is in the possession of Sir William John Hershell, of Oxford, England. It was kindly lent by him to the writer for exhibition at the Chicago Exposition.

Others in the faculty did conspicuous work in research in language, philosophy, and science.

The first university professional school was that of law. As early as 1835 the Hon. Benjamin F. Butler, at the request of the university council, submitted a plan for the organization of a school of law, which was published and has had an influence in shaping the instruction in law to the present time. The instruction was not actually begun until 1838, when three professors were inaugurated, each giving an address which was published. Their lectures did not continue regularly longer than 1839. Mr. Butler's course required three years

NEW YORK UNIVERSITY—LAW SCHOOL LIBRARY, WASHINGTON SQUARE.

for its completion. These were named the primary, junior, and senior years, to each of which a professor was assigned. Besides this work in classes a general course was to be given by the principal professor to the entire school, running through the entire three years. The school was to be in session afternoons and evenings. Mr. Butler's name remained on the roll of the faculty as the professor of law for some twenty years. At that date, 1858, regular instruction was resumed and has not since been interrupted.

The plan of a faculty of medicine was included alongside that of the faculty of law in the statutes adopted in 1831. The council as early as 1836 took action looking toward a faculty of medicine. A full discussion of a medical education appears in a report of the committee of the council. This report named the four years required in the German and French faculties as a desirable period, but agreed upon two years as the only practicable term in America. They advised in favor of 24 professors and as many adjunct professors. A faculty was elected in part, but on account of the financial difficulties arising the council proved unable to provide accommodations for the school of medicine, and instruction was not begun. Five years later the effort was renewed, and on the 27th of January, 1841, the faculty of medicine was elected, consisting of 6 professors, as follows: Valentine Mott, M. D., surgery; Granville S. Pattison, M. D., anatomy; John Revere, M. D., theory and practice of medicine; Martyn Paine, M. D., institutes of medicine and materia medica; Gunning S. Bedford, M. D., gynecology; John William Draper, M. D., chemistry.

The members of the faculty of medicine organized their work in a large granite building on the west side of Broadway, a few streets south of Washington place, where they continued for ten years, removing in 1857 to a building on Fourteenth street where Tammany Hall now stands. This building was burned, with valuable educational collections, in 1866. After a temporary stay in one of the buildings of the New York Hospital, they finally removed to their present site on East Twenty-sixth street, opposite the gateway of Bellevue Hospital.

Thus in the first decade of the university, 1831–1841, there are found four faculties undertaken, namely, the undergraduate faculty, named "the second general department," the faculty of graduate instruction, the faculty of law, and the faculty of medicine, all included in the first general department. Two of these three faculties, however, were at the end of the decade in a condition of suspended animation. The plans of the leaders of the university were a half century ahead of the demands of the nation. They were in advance of the views of the men who could have supplied the endowment which might even at that date have put them in successful operation.

The first decade, save the last two years, was under the leadership of Chancellor Mathews, 1831–1839. His work closed with a serious

alienation from him of the faculty of arts and science. It arose from his proposing, on account of the need of retrenchment, the cutting down the undergraduate faculty to five or six professors. The displaced professors very naturally were aggrieved. Warm feelings were stirred up on either side; finally the matter became a subject of State investigation. This report submitted to the legislature, December 31, 1839, declared:

> From all the testimony presented to the committee they are satisfied that the reorganization of the faculty of science and letters grew out of considerations connected with the condition of the finances of the university; and that the plan was proposed and consummated in good faith and without sinister motives on the part of the council; and the committee can not but regard the final proceedings of the council in removing the said professors by the act of 29th September, 1838, as justified by the hostile action of the professors, and their combined determination not to submit to the measures adopted by the council in good faith.
>
> The committee consider the dissension between the professors and the council as a peculiarly unfortunate one, and like most other contests of a similar character it has been conducted on both sides with a strong infusion of personal feeling.

The second decade of the university began under Theodore Frelinghuysen as chancellor, 1839–1850. It was a period of quiet, excellent work by the undergraduate college and the school of medicine. No new educational measure was attempted by him nor was any marked addition made to the university's resources, except the reduction of the debt at the time of his inauguration. The Rev. Dr. Gardiner Spring was chancellor ad interim, 1850–1852.

The third chancellor, the Rev. Dr. Isaac Ferris, completed almost two decades in service, being appointed in 1852 and retiring in the year 1870. He signalized his entrance upon office by the raising of funds to extinguish the debt of the university. This was followed by the beginning of the general endowment, which was the gift of three or four gentlemen, to the amount of nearly $200,000. The law faculty was revived under him in 1858, after its long suspension. A second notable educational event of the period was the founding of scientific courses leading to the degrees of bachelor and master of science, and of technological instruction leading to the degree of civil engineer. All this had been contemplated in the original founding of the university, but it was not till the decade of the war of the Union that public sentiment in the United States supported colleges in breaking away from the tradition that the baccalaureate degree must be reserved wholly for those students who have pursued classical studies.[1] The first bachelor of science degree granted by the university was given as early as 1857, and the first civil engineering degrees appear to have been given in 1860.

In its fifth decade (1870–1881) the university was under the chancellorship of Dr. Howard Crosby. Dr. Crosby, outside the university,

[1] It was the summer of 1862 when Congress made the munificent land grant for technological instruction.

had abundant work to tax his utmost energies. He called himself, half seriously, a chancellor ad interim. The same title was taken by Dr. John Hall, who succeeded Dr. Crosby. It was possible for neither to give the university the first place in his efforts. No similar experiment in the direction of dispensing with an executive officer has, perhaps, been attempted by any university or prominent college in America. Nor was the period chosen an opportune time for the experiment. The years succeeding the close of the civil war brought a new educational epoch to America. Great universities were founded; ancient colleges were transformed into universities. The decision of the eminent business men of the council that the university executive-office business might be conducted by something less than the entire talents and energies of one man was a compliment to the gentlemen whom they called to the chancellorship. It was not a testimony to the wisdom of the council in the conduct of affairs. Of course little or no advance was made by the university while it possessed only a nominal executive head. In 1880–81 the fact of existing debt and deficit incurred in connection with the undergraduate college and the lack of growth in the same led a portion of the council to advocate the suspension of the college and the expenditure of strength upon the professional or graduate schools. Legal obstacles forbade the carrying out of the measure; nor did it appear to very many that the strengthening of the university work proper, however desirable, could be best accomplished by letting go undergraduate instruction.

DR. MACCRACKEN'S ADMINISTRATION.

In 1884 New York University called to its service Henry Mitchell MacCracken, who at that time was chancellor of the Western University of Pennsylvania, in the city of Allegheny, opposite Pittsburg. The formal call extended to the professorship of philosophy. An informal request was made of him that he should take up as soon as possible the strengthening and enlargement of the university. At his suggestion the office of vice-chancellor was created, while the chancellorship was made for the time an honorary position without salary, as in the English universities. Dr. John Hall, who had been serving as chancellor ad interim, accepted the chancellor's office upon this understanding. This disposition of the executive office was made public at the commencement in 1885.

UNIVERSITY COLLEGE (UNDERGRADUATE).

The undergraduate college was given enlargement in 1884–1889 in the departments of physics, English, history, and modern languages.

The theory was consistently maintained that the undergraduate student in every case must be led at least a little way into each of the three great fields of study—language and literature, philosophy and history, exact and descriptive science.

This theory, it will be noted hereafter, has been maintained also in the introduction of the group system in 1894.

The opportunity for election in undergraduate study was until 1894 confined to a choice between the classical and scientific courses. These differed chiefly in this, that the latter substituted science for language to some extent, and substituted the modern for the ancient language throughout. Also as before named, students of science were enabled to pursue civil engineering by taking extra hours of study.

The old traditions of rhetorical training for all students, attendance at daily prayers, instruction in morals and in the Christian religion, were carefully maintained.

The provision for undergraduate specialization in the direction of engineering was broadened by the addition of a fifth year preparatory to the attainment of the degree of civil engineer. This was announced first in the catalogue of 1886.

In this same catalogue the subdivision of arts and science into two departments was abandoned, and emphasis was laid rather on the distinction between the undergraduate college of arts and science on the one hand, and the school of civil engineering as a technological school, on the other.

GRADUATE SCHOOL.

In 1886 the graduate school was opened. Graduate instruction had been in the thoughts of the men who founded the university in 1830. The degrees of master of arts or science or of doctor of science or philosophy, could henceforth be obtained upon examination only. The nearness of the Astor Library assisted graduate study.

The new chairs of comparative religion and pedagogy in the graduate school were established in 1886. A relatively larger place was given each of these studies than had before been accorded it by any university in America. The enrollment of resident students in the graduate school the first year, 1885–86, was 12. This rapidly increased until the attendance reached its present number.

A large majority of the graduate students were enrolled in the group of philosophy and history. Language and literature enrolled the next largest number. Exact and descriptive sciences on account of the lack of ample laboratory facilities had the smallest enrollment.

SCHOOL OF PEDAGOGY.

In 1890 the School of Pedagogy was organized. In 1887 a request had come to the vice-chancellor for the establishment of instruction in pedagogics for the benefit of college graduates. A single course in the history of education was announced under Jerome Allen, Ph. D., who was appointed professor of pedagogy in the graduate school. Six students were enrolled in this graduate course the first year. In addition to this work in the graduate school, courses of lectures were

THE NEW UNIVERSITY BUILDING, WASHINGTON SQUARE.

Home of the schools of law and pedagogy.

offered by Dr. Allen to nonmatriculants. Examinations upon these courses were appointed somewhat after the pattern of the university extension examinations of the English universities. The interest excited by these courses encouraged the university to announce the plan of a school of pedagogy, which should be parallel to the schools of law and medicine. Degrees in pedagogy were proposed. The lack of endowment delayed the opening of the school until September, 1890.

The chairs of instruction were history of education, experimental and physiological psychology, descriptive psychology, institutes of pedagogy, with lectureships on comparative study of national school systems, sociology in relation to education, and physiological pedagogics.

So far as known to those who have wrought in this school, it is the first university school of pedagogy to undertake professional instruction in pedagogy on the same plane with university instruction in law and medicine. Also New York University was first in establishing degrees in pedagogy. The public announcement by this university of its purpose to grant such degrees was made in March, 1890. Before, however, any degrees had been conferred, the university regents at Albany conferred an honorary doctorate of pedagogy upon an eminent teacher. The first degrees in pedagogy upon examination were conferred by New York University in 1891.

The university deemed it wise to proceed in the matter of degrees in pedagogy according to the usage in law and medicine. It did not therefore demand a bachelor's degree as a prerequisite, but required the diploma of a State normal college or its equivalent in order to enrollment. Testimonials of two years of successful teaching were demanded as a condition for the master's degree. For the doctor's degree four years of successful teaching were required. At first the master's course was made distinct from the course leading to the doctorate and adapted to less advanced students. At a later date the master's course was made identical with the first part of the doctor's course. The university was quite free to devise new degrees such as might best quicken the teaching spirit of the generation. This was the consideration which fixed the conditions of the degrees of master and doctor of pedagogy so that they were substantially equal to the conditions of the degree of master in law, or doctor in medicine, with the added requirement of experience in teaching. The requirements for the degrees of master and doctor of pedagogy are at present as follows:

The degree of master of pedagogy will be conferred upon a student who has met the following conditions:

I. He must have been credited with attendance upon the required lectures and seminaries.

II. He must have successfully completed four courses, three of which must be major courses.

III. He must either have presented a certificate showing two years' successful

experience in teaching, or he must have taught one year under the direction of the faculty and with such success as to receive their approval.

IV. He must have paid the fee of $20 for each major course, and $10 for each minor course required.

The degree of doctor of pedagogy will be conferred upon a student who has met the following conditions:

I. He must have been credited with attendance upon the required lectures and seminaries.

II. He must have successfully completed the five major and five of the minor courses. Certain minor courses are elective; the student is required to choose one of these in making up his list of minor courses.

III. He must have presented the prescribed thesis, as defined hereafter, and have received approval of the same.

IV. He must either have presented a certificate showing four years' successful experience in schoolroom work, or he must have taught two years under the direction of the faculty and with such success as to receive their approval.

V. He must have paid the fee of $20 for each major course and $10 for each minor course required.

The plan of the University School of Pedagogy has been accepted by several universities in America. Special professional degrees in pedagogy have also been adopted elsewhere.

The success of the School of Pedagogy is chiefly due to the efforts of the woman's advisory committee of the university. As this body is perhaps unique in university history, the following is given from the statute of 1890 which established it:

The council of the University of the City of New York, recognizing that the present year's enrollment of graduate students includes the names of women graduates of various colleges, and further recognizing that the school of pedagogy is likely to enroll women in equal numbers with men, deems it expedient that this corporation shall have the cooperation of representative women who will be interested in the promotion of university work for women in the most advanced lines of study and investigation.

To this end the council hereby establishes THE WOMAN'S ADVISORY COMMITTEE OF THE UNIVERSITY OF THE CITY OF NEW YORK, to be composed of 20 members, women, appointed by the council, one-fourth to go out of office annually upon May 1, when their successors shall be appointed by the council.

The council places the council room at the command of this committee for its meetings at any time not reserved for meetings of the council. It refers to the committee the making of its own by-laws and appointment of its own officers; also the formation of plans and the making of recommendations for the advancement of the university's work for women; but all such plans or recommendations shall, as in the case of other committees, be reported to and approved by the council.

UNIVERSITY LAW SCHOOL.

The University Law School in 1886 had but two professors and 72 students. It was reorganized in 1891 by the calling of Dr. Austin Abbott to the deanship and the addition of two professors, thus doubling the force of instructors giving daily lectures. Further, the old arrangement of apportioning the fees among the instructors was abolished, and instead a definite salary was assigned to each profes-

sor. The division of subjects was as follows: Equity jurisprudence; pleading and evidence; law of contracts and elementary law; law of real and personal property and of negotiable paper, law of procedure and torts. Six other important subjects were treated by lecturers secured from among eminent members of the New York bar.

A new feature was introduced in the subclasses in topics for special study. These were optional, and they were placed under capable young graduates of the school. A small extra fee was charged for these special courses. Further, quiz classes were introduced without extra charge.

By the direction of the chancellor, Dr. Abbott organized graduate courses, open only to persons already admitted to the bar or possessing the degree of bachelor of laws. Thirty-three students were enrolled in these courses the first year, 1891–92. Dr. Abbott's long service at the New York bar, and especially his labors in law literature, rendered his graduate courses especially popular.

Inasmuch as the State of New York had provided by a recent law for the admission of women as well as men to the legal profession, it seems that justice required that they should not be excluded from law schools. In the fall of 1890 three women were admitted to the school, and took their degrees in May, 1892. The largest enrollment of women has not yet reached 5 per cent of the whole number.

Contemporaneous with the admission of women to the law school a university-extension course on elementary law was established for nonmatriculants, and in particular for business women. The lecturer for the year 1890–91 was Mrs. Emily Kempin, who had received the degree of doctor of laws from the University of Zurich, in Switzerland. Four courses, each comprising 12 lectures, were given. These lectures occupied three forenoons each week for six months. They were repeated upon three evenings a week to classes made up of persons unable to attend in the daytime. Funds for the support of this lectureship were provided by a corporation of 12 women, entitled the Woman's Legal Education Society of New York.

UNIVERSITY MEDICAL COLLEGE.

The University Medical College in the circular of 1884–85 required only two terms of medical study, covering each six months. Its progress was hindered by a heavy indebtedness upon its property. With the year 1887, however, advanced steps began by the building of the Loomis laboratory and the reconstruction of the lecture rooms in the older buildings. In 1891, being the fiftieth anniversary of the medical college, the course was prolonged to two years of eight months each. The mortgage was removed and the professors were assigned fixed salaries, and thus made free to give their time and energy to instruction. These successive steps were made possible by the gift of over a third of a million dollars, which was almost equally appor-

tioned for three objects: First, the liquidation of the mortgage upon the older property; second, the erection of the Loomis laboratory; third, the endowment of the laboratory not only for the purposes of instruction, but of research. The result of this elevation of the standard of instruction brought about, not unexpectedly, a large decrease in the number of students. In 1890–91 there were 696 students, decreasing in successive years to 547, 460, and 362. This last was the lowest number enrolled under the requirements of a three years' course for the degree of doctor of medicine.[1]

The palm of leadership in the work of the medical college in this period was awarded by all to the senior professor, Dr. Alfred L. Loomis, who served the university in the department of the institutes and practice of medicine from 1864 until his death, January 23, 1895.

FROM THE PURCHASE OF UNIVERSITY HEIGHTS TO THE PRESENT TIME.

In November, 1890, Dr. MacCracken, in his annual report to the university corporation, spoke as follows:

> The marked advance of business into the neighborhood of the university raises the question whether our work might be advanced by any change of place.
>
> Our work for undergraduates might certainly be enlarged and improved were grounds of some extent, within easy distance of the chief residence quarter of our city, placed at our command.
>
> Our work for the school of law, the school of pedagogy, and the graduate division (except, perhaps, in courses requiring laboratory work) can have no better center than Washington square. Should, however, this ground become exceedingly valuable for business, the university could reserve for these objects the uppermost floor or floors of a great building to be erected upon this site, while the half dozen floors below might be made to add largely to our resources.
>
> The university college for undergraduates, planted in some neighborhood easily accessible, could enjoy the use of land free from ordinary taxation and constantly rising in value. At first the roll of students might be diminished, yet in a short time a university college in a residence quarter, with attractive grounds, would fulfill more nearly the American ideal of a college than a college in a business locality ever can.
>
> The graduate work would not suffer by the carrying on of some courses in the university building on this ground and other courses at the university college.

The report asked for the appointment of a "committee upon university needs and endowments." This committee consisted of George Munro, David Banks, and William F. Havemeyer, with Charles Butler, the president of the corporation, and Dr. MacCracken, as ex officio members. The majority of the older members of the council, while wishing well to the advanced movement, saw obstacles in its way which to them seemed almost insuperable. The committee upon July 1, 1891, took an option for one year upon a plateau of land between East One hundred and eightieth street and East One hundred and eighty-first street, overhanging the east bank of the Harlem River, with the Hudson and the Palisades in full view at the west and Long Island

[1] A course of four years has since been adopted.

Sound visible to the eastward. The tract stretched from Sedgwick avenue to Aqueduct avenue, unbroken by streets, a distance of over 1,600 feet, while from north to south the greatest width is over 800 feet. Besides this area included in the college campus, a site for boathouses on the Harlem River was secured, also grounds east and west of the university campus, but separated from it by city streets. These neighboring lots were designed to be sold to Greek-letter fraternities, professors, and others who might be especially desirous to plant themselves near by the undergraduate college. Subscriptions were solicited for the purchase of these grounds, to become binding when $200,000 had been promised. The total cost of the lands included in the college campus was about $400,000. The neighboring property purchased cost about $150,000 additional.

After the inception of the uptown movement Dr. John Hall retired from the chancellorship, which was conferred upon Vice-Chancellor MacCracken. By personal solicitation the latter secured subscriptions for the purchase of University Heights from more than 100 citizens of New York, amounting to $200,000, including the boathouse site, which was accepted as a subscription of $20,000. University Heights passed into the possession of the university on July 1, 1892.

A year later a few friends of the university purchased the estate lying immediately north of the university property and placed it on the city map as University Heights North. They were able thus to defend the University Heights neighborhood against undesirable uses, also to control the laying out of avenues and to enable the chancellor to secure a suitable residence.

Further, the Collegiate Church was provided with a handsome site fronting on the campus between Oxford Place and Loring Place. The Collegiate Consistory, the oldest ecclesiastical corporation on Manhattan Island, had generously resolved to establish a church at University Heights, no church edifice existing at that time within three-quarters of a mile of this point. They would provide not only fitting church buildings, but also the support of a minister out of their endowments, because of their interest in the work of the university, whose first three chancellors were honored members of the Dutch Reformed Church.

The university corporation was to profit further by "University Heights North," in that it was to receive the gift from certain gentlemen concerned of any profits derived by them from the transaction. Thus the total amount of land purchased, either by the university or on its behalf, approached 50 acres.

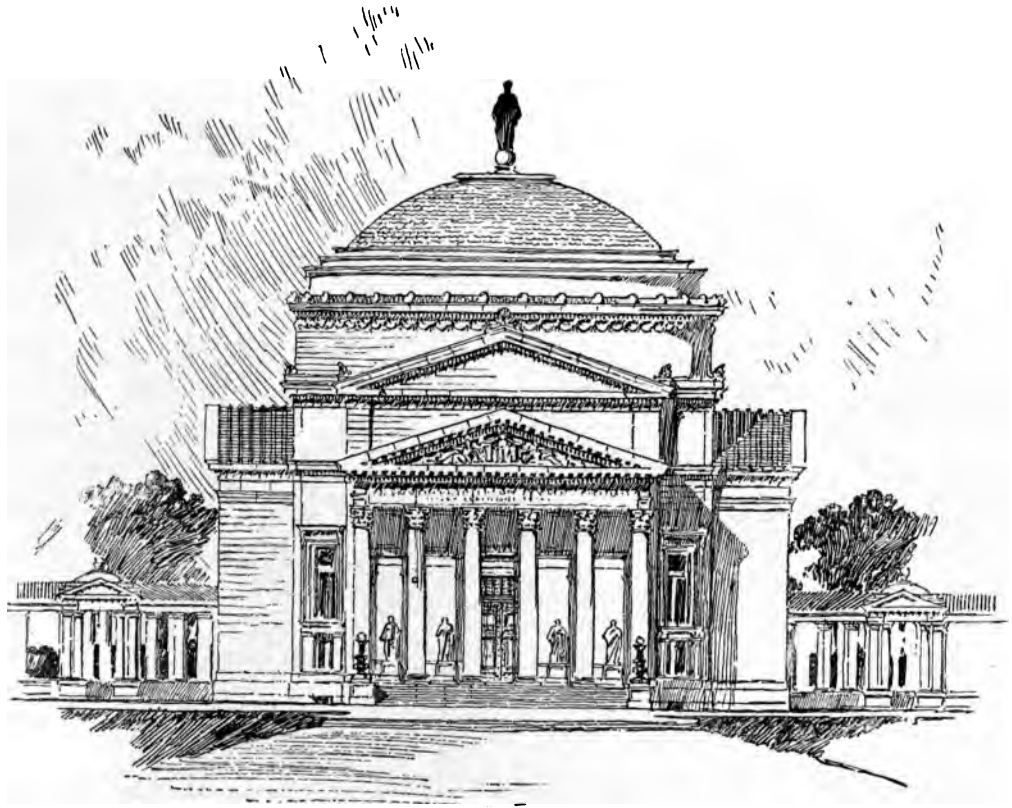
The work of securing subscriptions for the buildings at University Heights was carried on during the year 1893. The laboratory of chemistry had been pledged by Mr. William F. Havemeyer, of the university council, being the very first pledge toward the up-town movement. The larger part of the cost of the hall of languages was

secured in 1893 by Dr. Alfred L. Loomis. It was resolved early in 1894 to remove the college by October 1 of that year. This was made possible by the erection of several buildings of temporary character. The first stone for a building at University Heights was laid on Founders' Day, April 18, 1894, by the graduating class. This stone was taken from the walls of the old building upon Washington square, whose demolition had already begun. The last university exercises in the old building were held on the 18th of May, when the alumni held a farewell reunion. On October 1 there were ready for occupancy at University Heights five buildings, including the old mansion. The hall of languages was completed in November, the Havemeyer laboratory not until March 16. The great central building is at the date of this writing in the course of erection, comprising the library, administration offices, auditorium, and museum. Ultimately the entire building will, it is expected, be devoted to library uses, accommodating more than 1,000,000 volumes. For many years the library will not require the great hall, which will be used as an auditorium, seating over 1,500 people. The terrace-like extension toward the west will for the present form a museum about 250 feet long and nearly 40 feet wide, with a central skylight running its entire length. This will be subdivided into museums illustrating the work of various departments. A very striking feature of the library building is the ambulatory, which forms a semicircular colonnade above the western edge of the museum roof and extends southward to the hall of languages and northward to the hall of philosophy. It is constructed of Indiana stone, with a roof of Spanish tiles. Below the central point of this ambulatory is a fountain set against the wall, with a memorial tablet supported on three lions' heads from which the water pours into two huge granite basins placed one upon the other, whence it is conveyed to a drinking fountain on the edge of the avenue 30 feet below. The memorial tablet contains the following inscription:

> New York University, chartered MDCCCXXXI.
> University Heights, purchased MDCCCXCI.
> University College, removed MDCCCXCIV.
> This library was begun October, MDCCCXCV.
> Bibliotheca fons eruditionis.

The most striking characteristic of the library interior will be the lighting of the reading room from a dome in imitation of the Pantheon, while around the reading room will be not less than 18 seminary rooms, one for each department, with a stack room adjoining. The entire cost of this structure, including the ambulatory, will be about three-quarters of a million dollars.

The plan of University Heights from the beginning included residence halls for students. The old mansion was at once fitted up for students' use and named in honor of the venerable president of the council the Charles Butler Hall. In the fall of 1895 the college close was planned on the eastern side of the campus. It comprises at least



NEW YORK UNIVERSITY—LIBRARY BUILDING, UNIVERSITY HEIGHTS.

five residence halls with a dining hall, to be known, unless designated by the givers otherwise, East Hall, Northeast Hall, North Hall, Northwest Hall, West Hall, and South Hall. East Hall was built in 1896 at a cost of $180,000.

The final plan of University Heights comprises seven divisions of the entire territory owned by the corporation.

First, the "great quadrangle," of which the west side will be occupied by the library edifice and the halls of languages and philosophy, connected by the ambulatory, the north and south sides by the laboratories of science, and the west side by the small quadrangle.

Second, the "small quadrangle," a central group of buildings about 300 feet in length by 200 in breadth, around a court. These will be used chiefly for athletic and society purposes, albeit the south side will probably be a laboratory or museum.

Third, the "college close" with its six halls, inclosing a court which will measure about 200 by 300 feet. Each of these three divisions, it will be seen, will have abundant open space with air and sky.

Fourth, the Ohio field with its circumference of more than one-quarter of a mile. This field is given its name in recognition of the gifts of several Ohio men resident in New York, who contributed toward University Heights under a plan approved by the Ohio Society of New York in 1892, under the leadership of its president, Mr. William Strong (since mayor of New York).

Fifth, the "tennis courts."

Sixth, the "west lawn," stretching to Sedgwick avenue.

Seventh, the boathouses on the Harlem River.

In connection with the material provision made for the university college students, may be named here the large addition to the existing scholarships recently made. Up to 1895 in all the six schools of the University there were only three endowed scholarships; all others were tuition scholarships the burden of which was borne by the general treasury. But recently the scholarship fund has increased from about $10,000 to almost $100,000, of which about $60,000 belongs to the college or school of engineering and $35,500 to the school of pedagogy. The founders of scholarships are, Miss Helen Miller Gould, Mrs. Hannah Ireland, Miss Ida Northrop, Prof. Richard H. Bull, Mr. R. G. Remsen, Mrs. Martha Buell Munn, Mrs. W. G. Hitchcock, and Mr. Frank Jay Gould, besides others who have given parts of scholarships.

A new chapter in the educational work of New York University began with the occupancy of University Heights. The six schools are distributed to-day at three points in New York City, which form a triangle of which one side is 1¼ miles in length, the other two sides respectively 9 and 10 miles. Since the removal noteworthy changes have been inaugurated in every school. A brief view of the advance steps taken since January 1, 1894, will form a fitting conclusion of this history.

First, the group system. Beginning with the class entering in 1894, the freshmen are distributed into three sections, the first requiring both Greek and Latin; the second, allowing the replacing of one of these languages by a modern language; the third, omitting the ancient languages altogether, and laying emphasis on preparation in science and the modern languages.

At the beginning of the sophomore year the students must enter one of the ten parallel groups arranged for the last three years of undergraduate study. They are numbered and named as follows:

I. Classical.
II. Modern language.
III. Semitic.
IV. English-classical.
V. Historical-political.
VI. Philosophical-historical.
VII. Chemical-biological.
VIII. Physical-chemical.
IX. Mathematical-physical.
X. Civil engineering.

A group once elected, the student's subjects are prescribed for at least two-thirds of his time during both the sophomore and junior years. The group system is thus sharply differentiated from the elective system; at the same time it differs greatly from the old system in allowing the student to specialize in a very considerable degree during his last three college years. This opportunity of specialization is still further enlarged for students of exceptional attainments and mature age, by allowing them to substitute for the work of the senior year, except three hours each week, the first year's work of the University Law School, the University Medical College, or the University School of Pedagogy.

After three years' trial, the group system proves successful. But the result of the opportunity given strong men for shortening their college course by combining with the senior year the first year of professional study can not be satisfactorily known for several years to come.

The University College has as its dean, Henry M. Baird, D. D., LL. D., the senior professor of the university.

The University Graduate School, which at first was presided over by the chancellor, now has as dean, John Dyneley Prince, Ph. D. The candidate for a doctor's degree is required to choose a major subject in which he must take three courses, each running throughout an entire year, and all of them in the same department. The three minor courses may, one of them, be in the same department with the major; another must be in the same group.[1] A written examination is required in each course; besides these there is a final oral examination and a thesis demanded for the doctorate. The University Graduate School has attained success beyond the expectation of the faculty. This success is due in part to its being in the midst of a great com-

[1] For the purposes of graduate study, the entire field of learning is divided into three groups, namely, Language and literature, Philosophy and history, and the Exact and descriptive sciences.

NEW YORK UNIVERSITY—HALL OF LANGUAGES.

munity, numbering more people within an hour's ride of the university building on Washington Square than are found in the whole of Scotland. The result must be largely ascribed, however, to the zeal and industry of the professors, which has been out of all proportion to the small compensation received by them.

The School of Engineering, which has recently taken on new strength, is presided over by Prof. Charles H. Snow. The equipment of the school has been multiplied tenfold since its removal to University Heights. Nevertheless, while the substructure exists for several lines of technological instruction, it is not thought wise to inaugurate at present departments of mechanical or mining engineering or architecture. New buildings will be needed for these and endowment for several new professorships.

The School of Pedagogy entered its new quarters in Washington Square building in 1895, but already they are proving narrow. A special library of pedagogy has been gathered, which promises to become one of the foremost collections of books treating of the subject of education. The standard of the school has been maintained and advanced. About 70 per cent of the school at this time are possessed of the bachelor's degree. The rest are as a rule graduates of normal schools.

The school of law met with a severe loss in the death of its dean, Dr. Austin Abbott, which occurred April 19, 1895. Nevertheless, the impress of his five years' untiring work has remained. Fortunately for the school, new strength had been brought in before Dr. Abbott's death by the consolidation with the University School of a young corporation organized by Abner C. Thomas, LL. D., now surrogate of New York, for evening law instruction, known as the Metropolis Law School. The senior professor of this school, Clarence D. Ashley, had been made vice-dean of the University School, and is now acting as dean in Dr. Abbott's stead. Several younger men have been called to professorships, which they are filling successfully. The law library rooms, admirably arranged and lighted, were opened in 1895, upon the topmost floor of the new university building at Washington Square. The enrollment of students is much larger than at any time previous in the history of the university, approaching very nearly 600.

The University Medical College took the advanced step of requiring a course of four years for all students entering after January 1, 1896. Subsequently the State of New York enacted a law making a four years' course obligatory after 1897. It involved no little sacrifice to go in advance of the State requirements. The immediate result of the step was a marked decrease in the numbers of the entering class. Nevertheless, the faculty count that the school gains in the quality of its students and will be enabled to perfect its four years' course the more successfully because the classes will not be overcrowded.

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COLGATE UNIVERSITY, 1846.

By Prof. N. L. ANDREWS.

This institution, located in Hamilton, N. Y., traces its history from 1820, when a "literary and theological seminary" was opened, under the auspices of the Baptist Education Society of the State of New York, with Rev. Daniel Hascall, A. M., as principal.

The Education Society owed its origin to a desire, on the part of a few broad-minded and far-sighted Baptists in central New York, to secure a better training for the ministry of that denomination. Rev. Daniel Hascall had become pastor of the Baptist Church in Hamilton in 1812. He was a graduate of Middlebury College, Vermont, in the class of 1806. It is said that he was, at the time of the founding of the society, one of three only among Baptist ministers west of Albany who had received a liberal education. In 1816 he suggested to the

COLGATE UNIVERSITY—EAST AND WEST COLLEGES. FROM THE NORTHWEST.

Rev. Nathaniel Kendrick, then visiting Hamilton, the importance of establishing an institution, and in 1817, when Mr. Kendrick became a pastor in Eaton, N. Y., they, with a few other ministers and several laymen of sturdy mental and moral strength, united in forming the Baptist Education Society of the State of New York. These thirteen men met at the house of Jonathan Olmsted, and thirteen prayers and thirteen dollars constituted the first spiritual and material endowment of the new organization.

Early in 1818, the first student, Jonathan Wade, began his studies in the house of Mr. Hascall. Eugenio Kincaid came soon after. These men became foreign missionaries, and did long and distinguished service in Burmah. Not until May 1, 1820, was the institution formally opened. A half dozen students then took possession of the third story of a building in the village, whose second story was occupied by the Hamilton Academy, and its first story by the district school. Principal Zenas Morse of the academy assisted Professor Hascall in giving instruction. In 1821 Rev. Nathaniel Kendrick was appointed professor of theology and moral philosophy. The increasing number of students soon required larger accommodations, and in 1823 these were found in a larger building in the village. Even this soon proved inadequate, and a more suitable location, on a site ample for future needs, was opportunely offered by the generosity of Samuel Payne, one of the original thirteen, who in 1826 made over his farm to the Education Society. The site has great natural advantages, overlooking the village of Hamilton at a convenient distance, and commanding the view of a most picturesque landscape.

The first building upon "the hill," now known as West College, was erected in 1827. The building of East College in 1834 was a material token of the institution's rapid growth. Its intellectual equipment had been meanwhile increased by the addition of six professors. Prominent among these were Barnas Sears, Asahel C. Kendrick, George W. Eaton, and Stephen W. Taylor. The early course of instruction, mingling literary and theological studies, covered three years. In 1829 it was extended to four years, in 1832 to six, and in 1834 to eight. Of these two belonged to the academic department, four to a collegiate course, and two to theology. The first college class, numbering seven, was graduated in 1835. As yet, however, the institution had no power to confer degrees. It still continued to be an institution exclusively for ministerial education. Not until 1839 were its doors opened for all students seeking higher education.

Movements for a collegiate charter made in 1840 and in 1843 were for various reasons ineffective, but in 1846 an act of incorporation was obtained under the name of Madison University. This was the natural culmination of the rapid development of fifteen years preceding. The faculty compared favorably with other institutions. Asahel C. Kendrick and George W. Eaton were still prominent, while Thomas

J. Conant and John H. Raymond were among later accessions to a strong teaching force. The new university corporation made arrangements with the Education Society by which it came into use of the buildings and other educational facilities possessed by the latter, and the two corporations have since cooperated harmoniously. The trustees of the Education Society have the special oversight of the theological department, known as the "Hamilton Theological Seminary," and possess the right of nominating all theological professors. They have the exclusive control of any endowments for theological instruction, and the society is especially charged with the raising of means for the aid of ministerial students.

Hardly a year had passed when a project was developed for the removal of the university to the city of Rochester. The movement had strong support in the boards and in the faculty, and the controversy continued nearly three years at meetings of the trustees, in educational conventions of representative Baptists, and in the courts. The friends of the Hamilton location triumphed by obtaining a perpetual injunction April 23, 1850. The advocates of removal, cooperating with the citizens of Rochester, united in establishing there two new institutions, the University of Rochester and the Rochester Theological Seminary, and for the organization of their faculty drew from Hamilton all the professors of Madison University except George W. Eaton and Philetus B. Spear. A large part of the students naturally followed.

Madison University began, therefore, a new era in the autumn of 1850. Its faculty was reorganized, and a movement for endowment was begun. Stephen W. Taylor, who in 1845 had left the faculty and in 1846 had become president of a college at Lewisburg, Pa., now Bucknell University, was called back to Hamilton as president of Madison University, and entered upon his duties in 1851. He is reckoned as the second president, because in 1836 Dr. Nathaniel Kendrick was chosen president of the "Literary and Theological Institution," and, though he did not formally accept, was the virtual head of the institution until 1848. The friends of the university rallied to its support, students increased in number, and the administration of Dr. Taylor, which closed with his death in 1856, left it in a condition of prosperity which had not been surpassed in the period preceding the controversy over removal. During his administration, in 1853, Ebenezer Dodge became a theological professor.

The administration of President Eaton covered the period between 1856 and 1868. In 1860 a new and spacious building was erected for lecture rooms, the library and the chapel, the third story serving for the auditorium at commencements. This edifice is known as Alumni Hall. During the war, in common with other colleges, the university experienced a decrease of students. The beginning of the new era which came with peace was attended by accessions of students and

an increase of financial resources. Mr. John B. Trevor, of New York, gave $40,000 to establish scholarships for soldiers and their sons. Between 1865 and 1868 about $100,000 of additional endowment was secured. In August, 1868, Dr. Eaton resigned the presidency of the college and became president of the Theological Seminary. In this position he remained until his death in 1872.

Dr. Ebenezer Dodge became the fourth president of the university in 1868. The increasing resources gave opportunity for expansion in educational appliances, and for enlargement in the corps of instructors. The first year of his administration was marked by an increase and reorganization of the faculty. Among the young professors appointed at this time, who cooperated with the president in building up the reputation of the university, was John James Lewis, who held the chair of English and oratory until his greatly lamented death in 1884.

The commencement of 1869 was signalized by a celebration of the "jubilee year," or semicentennial of the university. The enthusiasm of patrons and alumni took form in the raising of a jubilee fund which amounted to $135,000; and in record of the progress of the institution a volume was published in 1872 entitled, The First Half Century of Madison University. In the prosecution of efforts for endowment Philetus B. Spear was especially prominent. He had been connected with the institution, first as instructor and afterwards as professor, since his graduation in 1836. To his firmness and sagacity had been largely due the defeat of the effort to remove the university. In 1864 he was appointed treasurer, and administered the duties of the office with marked success until advancing age compelled him to relinquish it in 1888.

Prominent among the patrons of the university in this period of financial enlargement were the Colgates (James B., Samuel, and Robert) and John B. Trevor, of New York, and Col. Morgan L. Smith, of Newark, N. J. The first four gave liberally to endow the university. Colonel Smith made large annual contributions to the Education Society, and at his death in 1883 willed to the university a considerable fund for the maintenance of scholarships in the Theological Seminary. From the beginning of Dr. Dodge's presidency various scholarships, both for ministerial and other students, were from time to time added, and prizes were established in connection with various departments of the university which have promoted scholarship, stimulated literary effort, and tended to cultivate excellence in oratory.

In 1873 the preparatory school, which for twenty years had been known as the grammar school of Madison University, entered a new building, erected by Mr. James B. Colgate on grounds separate from, but contiguous to, the university campus. Since that date it has been known as Colgate Academy. The donor, in connection with Mr. John B. Trevor, provided a special endowment for it, and the general

THE COLGATE LIBRARY BUILDING.

M. Taylor, LL. D., professor of mathematics; William Hale Maynard, D. D., professor of political economy; Sylvester Burnham, D. D., professor of biblical literature; Joseph F. McGregory, A. M., professor of chemistry and mineralogy; Benjamin S. Terry, A. M., professor of civil history and English; William H. Crawshaw, A. M., associate professor of English; William C. Eaton, Ph. D., professor of engineering; Aaron H. Cole, A. M., lecturer in biology and geology; Frederick W. Colegrove, A. M., professor of the Latin language and literature; [1]Robert W. Moore, Ph. B., instructor in modern languages.

Theological Seminary: [2]Ebenezer Dodge, D. D., LL. D., professor of Christian theology; Alexander M. Beebee, D. D., professor of homiletics; Hezekiah Harver, D. D., professor of New Testament exegesis and pastoral theology; William H. Maynard, D. D., professor of ecclesiastical history; Sylvester Burnham, D. D., professor of Hebrew and Old Testament interpretation; Hinton S. Loyd, D. D., lecturer on methods of Christian work; Nathaniel Schmidt, A. M., associate professor of Semitic languages.

Academy: John Greene, Ph. D., principal, and instructor in history; Eugene P. Sisson, A. M., assistant principal, and instructor in mathematics; Charles W. Sheldon, A. M., instructor in Greek and German; Frank A. Gallup, A. B., instructor in Latin and French; William F. Langworthy, A. M., instructor in natural sciences; George S. Mills, A. B., instructor in English and elocution.

A new era in the history of the institution has been introduced by the change of name to Colgate University. This action, proposed by President Dodge, was voted by the board of the university and approved by the trustees of the Education Society at the annual commencement session in 1889. The change went into effect by vote of the regents of the University of the State of New York on March 13, 1890, and by order of the supreme court issued April 22, 1890. Various considerations led to this change of name. The former designation, "Madison," had never been chosen deliberately, but by the hasty action of the committee appointed to secure the charter. As the name of the county it seemed to suggest an aim and scope too circumscribed to be in harmony with the history and the purposes of the college. Experience has shown, also, that the name was often confused with the State University of Wisconsin, at Madison, and with Hamilton College, at Clinton, N. Y. It had long been felt by many that a more distinctive name would be advantageous. If the name of a benefactor was to be assumed, none could be so fitting as that of a family which for three generations has exercised most generous liberality toward the institution, As early as 1823 William Colgate, and his wife, Mary Colgate, became deeply interested

[1]Appointed August 21, 1890.

[2]Vacancy filled June 18, 1890, by appointment of William N. Clarke, D. D., as J. J. Joslin professor of Christian theology.

patrons. Beginning after their death, James B. Colgate has from time to time made munificent gifts in endowment funds and in buildings. His brothers, Samuel Colgate and Robert Colgate, have also been liberal donors to its funds. In the third generation James C. Colgate and Richard M. Colgate were connected with the two boards of control. The name has been honorably associated so long with every religious and educational movement of the Baptist denomination that the propriety and significance of the designation Colgate University was readily recognized by the alumni and by the public.

In view of the fact that all institutions for higher education demand ever-increasing resources, the friends of the university review with gratification the growth of its endowment within the past thirty years. In 1864 the productive funds were $62,000; in 1865, $121,000; in 1868, $177,000; in 1870, $255,000; in 1874, $304,000; in 1876, $405,000; in 1881, $480,000; in 1888, $500,000. The value of the various university buildings, including the president's house, of the grounds, the library, the museum of natural history, the chemical and physical apparatus, and other material equipment is not less than $340,000.

The commencement of 1891 was signalized by the princely gift of $1,000,000 to the university by Mr. James B. Colgate, of New York. This sum is to be held in trust for the university and is to be known as the "Dodge memorial fund," in honor of the late President Dodge. The income of one-half of this fund is available for the general purposes of the university, while the income of the other half will be accumulated and added to the principal until a time, to be determined by the regents of the university, when the whole income will be annually available. Other donations, from various sources, announced at the commencement of 1891, amounted to more than $110,000. The trustees and the faculty of the university believe that the future development of the institution will keep pace with the demands of our country and of the new educational era.

The alumni of the college have been 1,076. The theological seminary has graduated about 700. During the year 1890–91 the number of students in the university was 136; in the seminary, 50; in the preparatory school, 179.

After the death of President Dodge, Dean Andrews served as acting president until the appointment, in 1896, of President George William Smith, LL. D.

UNIVERSITY EXTENSION DEPARTMENT.

In 1892 a department was organized to carry on university extension work. The head of this department is Prof. Ralph W. Thomas.

The university extension department will give needed assistance at the organization of centers in central New York, and will arrange for lectures by members of the college faculty on the subjects advertised wherever their services may be required. Each course consists

COLGATE LIBRARY BUILDING—THE GRAND STAIRCASE.

CHEMICAL LABORATORY OF COLGATE UNIVERSITY.

of ten weekly lectures. The university extension plan comprises lectures, the syllabus, class work, written work, guided reading, students' clubs, and final examination at the end of the course. The class work, written work, students' clubs, and final examination are voluntary.

This work is connected with the university extension department of the University of the State of New York, and final examinations are conducted by the State regents.

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UNIVERSITY OF BUFFALO. 1846.

This institution was chartered with full collegiate powers May 11, 1846. Its general philosophical work was never organized, however, and it is composed only of the following special schools:

University of Buffalo, James O. Putnam, chancellor; Buffalo law school; medical department; college of pharmacy; college of dentistry; school of pedagogy.

ST. JOHN'S COLLEGE. 1846. FORDHAM.

This college, located at Fordham, is under the management of the Jesuit fathers. Two kinds of instruction are offered, classical and

commercial. The commercial course extends over five years. In it the study of Latin and Greek is not required. The classical course is that of the ordinary college.

The Rev. Thomas J. Gannon, S. J., occupies the president's chair. Instruction is given by a corps of 33 teachers. The number of students is given in the One hundred and seventh Regent's Report as 83.

By laws of 1862, chapter 453, the lands in actual occupation by the college, with the buildings thereon, are made exempt from taxation by town and county authorities for support of schools.

Its charter of incorporation by the legislature will be found in chapter 61, laws of 1846.

The net value of the college property amounts to $341,933.

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THE UNIVERSITY OF ROCHESTER. 1846.[1]

When in 1846 a collegiate charter was granted to the Hamilton Literary and Theological Institution, incorporating it as Madison University, a controversy arose out of a proposal to transfer the university from the village of Hamilton to Rochester. A charter was obtained from the legislature May 8 of that year. After a long struggle involving a legal contest several of the professors and a large number of students left Madison to establish a new university in Rochester. Among the former were Prof. A. C. Kendrick, D. D., Prof. John A. Richardson, A. M., and Prof. John H. Raymond, A. M.

CHARTER AND ORGANIZATION.

A provisional charter was granted by the regents January 31, 1850, which sanctioned the establishment of the University of Rochester, provided that $130,000 be subscribed for this purpose in two years, of which sum $30,000 was to be vested in site and buildings and $100,000 in permanent endowment.

The regents, February 14, 1851, issued the charter under which the university is at present organized, which still, however, contained the proviso that within five years the regents must be satisfied that at least $100,000 had been permanently invested in State or national bonds or in mortgages on unencumbered real estate worth double the amount of the mortgage, in order that the charter might become perpetual.

[1] This sketch is mainly an abridgment of Professor Gilmore's Outline History of the University of Rochester, 1886.

The charter thus granted, which is in all respects similar to the old charter of Columbia College, in the city of New York, simply invests the corporation of the university "with all the privileges and powers conceded to any college in this State, pursuant to the provisions of the sixth section of the statute entitled 'An act relative to the university,' passed April 5, 1813."

The charter did not vest the control of the university in any religious denomination. It simply created a self-perpetuating board of trustees—24 in number—who hold office for life, but who may be removed, by vote of their associates, for nonattendance at three successive annual meetings. Twenty of the trustees named in the charter were Baptists, and the Baptists have thus maintained an effective control over the university, though different religious denominations have always been represented in its board of trustees and its faculty of instruction, and many of its students are from other than Baptist families.

To the minds of those who founded the University of Rochester, a denominational college is established not to inculcate the distinctive tenets of their denomination, but to give an opportunity for the higher education of children under influences which shall not be hostile to the faith of their fathers.

The university has no connection with either the State or the General Government. In 1857 the State of New York granted the university $25,000 toward the erection of a permanent building for library, chapel, and recitation rooms, upon condition that the friends of the university raise a like sum for its benefit. This condition was met by Gen. John F. Rathbone, of Albany, who gave $25,000 to constitute a library fund for the institution. With this exception the university has received no aid either from the State or the nation.

It has no organic connection with the public-school system of the city of Rochester, and yet it is practically the capstone of that system and its influence is felt to the lowest grade of the primary schools of the city in which it is established. Three scholarships, yielding free tuition in the university, are awarded in each class to students fitted for college in the public schools of the city, and thus, through the existence in Rochester of this university, an intelligent and industrious young man can secure, free of cost, a college education.

Immediately after the granting of the provisional charter those trustees of the new university who were still trustees of Madison resigned their positions on the latter board, but gradually, so that that board, by filling the places of the resigning members with friends of Hamilton, might not be left without a quorum.

The trustees of the new university met informally at Rochester, May 13, 1850, appointed a committee of seven to mature a plan of instruction, and transacted other business, to which reference will be elsewhere made. The first duly called and notified meeting of the

trustees of the University of Rochester was held in the committee room of the First Baptist Church September 16, 1850. The trustees organized, under the provisional charter granted by the regents. They also created an executive committee, consisting of nine members of their own body, three of whom were to be elected annually, who were not only to carry into effect the action of the board, but invested with "power to create and enforce every regulation required for the immediate good of the university; to call meetings of the corporation, and, in general, to take such measures as may to them seem expedient for the well-being of the institution, provided always, that their acts shall be in force until the next meeting of the corporation, and no longer, unless they be sanctioned by that authority."

The trustees further voted at this meeting that the new institution should go into active operation on the first Monday in November, 1850, and authorized the executive board to lease and fit up, for the temporary use of the university, a building on Buffalo (now West Main) street, formerly known as the United States Hotel.

Suitable rooms for chapel exercises, recitations, etc., were fitted up in the building designated. The undergraduates of Madison flocked to the temporary quarters which the building afforded them, and on the day prescribed the university was an accomplished fact. Its first catalogue reported 8 instructors and 71 students. In July, 1851, it graduated a class of ten.

It may seem strange at the present day that such a termination of the long controversy between Rochester and Hamilton could not have been sooner and more amicably attained, but it must be borne in mind that no one thought at that early time that the Baptists of New York would ever need or could possibly sustain two colleges. The removal of Madison University was deemed by those who advocated it absolutely essential to the establishment of a Baptist college in a suitable locality, with a competent endowment and under such auspices as should command the patronage of the general public. Time has shown that they were mistaken in this. Time has also shown that the establishment of the University of Rochester, by rallying the friends of Hamilton to the support of "Madison," was worth to that institution a great many thousand dollars.

It was no easy matter to establish a new university at Rochester. Even to obtain a charter for such an institution was difficult; how much more to raise the $130,000 which the provisional charter required within two years. The Baptists of Rochester set themselves about this task with characteristic energy. A few friends met in the committee room of the First Baptist Church, December 31, 1849, and began the work by subscribing, on the spot, $12,000. The subscription was pushed by John N. Wilder, of Albany; Deacon Oren Sage and Deacon Alvah Strong, of Rochester (neither of whom ever asked or received a penny for their services), till it reached $80,000. James Edmunds,

ROCHESTER UNIVERSITY—ANDERSON HALL.

Isaac Westcott, Zenas Freeman, and Elon Galusha carried forward the work which had been thus auspiciously begun. The Baptists of New York were incited to renewed effort by the stirring appeals and the cheering announcements made in the Annunciator, a little paper published occasionally in the interests of Rochester. The result was that in less than a year after the first subscription was made the conditions of the regents were substantially complied with.

The progress of the new institution was so sudden and so wonderful that Ralph Waldo Emerson, according to Mr. Wilder, used it as an illustration of Yankee enterprise, saying that a landlord in Rochester had an old hotel which he thought would rent for more as a university, so he put in a few books, sent for a coach load of professors, bought some philosophical apparatus, and by the time green peas were ripe had graduated a large class of students. Mr. Emerson was certainly familiar with the marvelous growth of our university. "I watched over it in its cradle," he once remarked to the writer; "I am very certain that I shall never follow it to its grave."

IMPORTANT EVENTS IN THE HISTORY OF THE UNIVERSITY.

September 27, 1850, the Hon. Ira Harris, of Albany, was elected chancellor of the university by the executive board, in which capacity he presided on commencement day until the election of a president.

1853.

April 6. At a special meeting of the trustees the presidency was tendered to Martin B. Anderson, of New York, at a salary of $1,800 a year.

July 9. At the annual meeting of the trustees a letter of acceptance was read from President Anderson, who entered upon his duties at the beginning of the fall term.

It was voted, 14 to 4, to accept the gift of 8 acres of land, valued at $10,000, which was tendered to the university as a permanent site by the Hon. Azariah Boody. The land thus secured was that on which Anderson and Sibley halls now stand.

Seventeen acres, in addition to Mr. Boody's gift, was subsequently purchased, with the idea of laying it out in house lots, by the sale of which the endowment of the university might be promoted. This idea was abandoned after lots enough had been sold to seriously mar the beauty of the campus.

1857.

March 7. The legislature of the State of New York voted $25,000 toward the erection of a new building for the university; provided that an equal sum should be added to the funds of the university from other sources. The condition was promptly met by Gen. John F.

Rathbone, of Albany, who gave the university $25,000 to constitute a library fund.

1861.

January 10. The charter of the university was made perpetual by the regents—its provisions having been satisfactorily met.

1865.

September 18. Professor Cutting reported that the sum of $100,000 had been added to the endowment of the university.

1866.

The president's salary was raised to $3,000, and some addition was made to the salary of the other members of the faculty.

1869.

The university received from Macmillan & Co., of London, a very complete set of their valuable publications—being one of the three American colleges thus honored.

1870.

Tracy H. Harris, of New York, completed the endowment of the professorship of mathematics, for which he had subscribed $30,000.

An alumni association was formed in New York City. Manton Marble, esq., of the New York World, was its first president.

1874.

Early in the year, Professor Lattimore, delivered a course of free lectures to the workingmen of Rochester, which excited such interest, and was productive of such good results, as to become a permanent feature of Rochester life—giving rise to the "Lattimore Free Lecture Course."

1880.

Through the untiring efforts of President Anderson, $256,800 was added to the permanent endowment of the university.

In addition to the gifts above mentioned, Anderson Hall was thoroughly renovated and completely refurnished by Mrs. Bertha A. Deane, of New York, at an expense of $3,150, and to the boundless gratitude of those most interested.

1882.

Decided changes were made in the curriculum, which may be typified by the facts that one term more of German and one term less of

Greek are, from this date, required of the students; that the calculus is made optional with French, etc., etc.

1888.

President Anderson resigned. He was succeeded by David J. Hill, LL. D.

AIMS AND METHODS OF INSTRUCTION.

One of the published reports of the university states that—

> The purpose of the institution is to prepare men, by sound elementary instruction and thorough discipline, for those professional or technical studies which they intend to pursue at a later period in their student life, and which they can not pursue to advantage without a certain degree of general culture. Hence the students are trained and taught with predominant reference to their wants as men, not as ministers, lawyers, or doctors in embryo. Attention is, however, given to the development, or repressal, as the case may demand, of individual tastes and tendencies; and some degree of choice is permitted in the studies of the junior and senior years, with reference to the calling which the student has in mind.

That this has been, from the outset, the design of the institution, is seen from a very able report made to the board of trustees, September 16, 1850, by a committee, appointed by that body, consisting of Robert Kelly, esq., Rev. William R. Williams, D. D., Hon. F. Whittlesey, and Professors Dewey, Conant, Kendrick, and Raymond.

In this report the current objections to a collegiate education, as previously conducted, are dispassionately discussed, and the proposed remedies for alleged evils (such remedies as dispensing with the study of the classics and the higher mathematics, to make room for the physical sciences and the modern languages, making the studies of a large part of the course entirely optional with the students, etc.), are intelligently considered.

It will be seen from this report that, so early as 1850, the university of Rochester entered upon four experiments, which some of the older colleges tried at a later day, or are trying still—namely:

1. So arranging the course of instruction that the student who takes neither Latin nor Greek can graduate with the same honor as if he had studied these languages.

2. Terminating the compulsory study of Latin and Greek with the sophomore year.

3. Requiring none of the higher mathematics of the classical student.

4. Making the studies of the classical course to a considerable degree optional after the second year.

The changes were mainly due to the influence of President Anderson, whose inaugural address on "The end and means of a liberal education" sufficiently explains and vindicates them.

The curriculum is adjusted to the average student's working capacity. All students of more than average ability are encouraged to pursue additional courses of study, not simply for honors and prizes, but in order to give them the opportunity to pursue under proper direction the special studies for which they have the greatest aptitude. . . . . The habit of looking at every branch of instruction from the historical standpoint, of studying, in its genesis and growth, every subject, not only politics and law, but language, political economy, philosophy, physical science, and even mathematics, has always characterized the work of this college. "That man stands firmly who sees the progress of thought through the ages," is a principle which the president [Anderson] has not only enunciated, but has aimed to enforce.[1]

The university does not engage in professional instruction. Besides the regular courses leading to a degree, there are "seminary courses entirely voluntary, and intended only for advanced students who are willing to do extra work under instruction, and consisting in weekly assigned exercises conducted in the manner of a German seminar."[1] There are also "honor studies without recitation-room work of any kind, but involving private reading and examination or a thesis, or both, at the discretion of the professor."[2] These courses, together with the establishment of a few graduate scholarships, show that this institution is attempting some steps forward in the direction of a true university.

REQUIREMENTS FOR BACHELORS' DEGREES.

[Catalogue, 1894–95.]

Four courses of study, each extending through four years and leading to a degree, are open to the students of the university:

I. The classical course, in which both Greek and Latin are required for admission and are continued in the course, leading to the degree of bachelor of arts.

II. The Latin-scientific course, in which Latin and one modern language are required for admission and continued in the course, leading to the degree of bachelor of philosophy.

III. The Greek-scientific course, in which Greek and one modern language are required for admission and continued in the course, leading to the degree of bachelor of philosophy.

IV. The scientific course, in which two modern languages are required for admission and continued in the course, leading to the degree of bachelor of science.

ECLECTIC STUDENTS.

Eclectic students who may desire to receive instruction in particular departments, without becoming candidates for a degree, are admitted, providing they have the requisite preparation for the studies of those

[1] Public Service, etc., III, 321. [2] Annual Catalogue, 1890–91.

departments and become subject to the laws of the university. This arrangement is intended to meet the wants of those whose circumstances may prevent them from pursuing any of the regular courses, but who are desirous of obtaining that liberal culture which the studies of a portion of the course will give them. Special care is taken to give such pupils the instruction which they require, and they will, on severing their connection with the university, be given certificates covering all work that has been completed and tested by examination.

PREPARATION FOR PROFESSIONAL STUDY.

The order of studies and the wide range of electives furnish an excellent opportunity to secure that special fitness for the beginning of strictly professional studies which has been so much desired. In addition to the general studies, the student contemplating medicine can devote two years to those chemical and biological studies which are so important as an introduction to the medical profession. In like manner, the student looking forward to the profession of law may supplement his required courses in history with full instruction in Roman law, constitutional law, and international law. So also, the theological student may choose additional courses in the Greek language and philosophy; while one looking forward to journalism may secure a special preparation in literature, history, and constitutional and international law. The value of this arrangement is apparent to those who are aware that the strongest argument so far advanced for the shortening of the collegiate course is the fact that so much time is usually expended upon studies that have little bearing upon subsequent professional work.

UNIVERSITY EXTENSION DEPARTMENT.

The university extension department of the University of Rochester has been organized to bring systematic university instruction within the reach of all classes of men and women throughout western New York without interfering with their daily work. It is well known that a vast majority of the children are forced to leave school early to become breadwinners, and to them the doors of higher education have in the past been practically closed. While it is obviously impossible to give a regular university training without attendance at the university, yet it is entirely possible by the extension method to give a broader outlook over the world of literature, science, and art. In England, where the movement originated twenty-one years ago, it has won increasing respect from scholars, and has been cordially indorsed by such a distinguished authority as Professor Jebb. A convincing proof that extension courses stimulate genuine habits of

study and research, and thus give assurance of permanent benefit, is found in the report of the Reynolds Library of this city for 1894. The report says: "The most important class of organized readers has been made up of those persons connected with the university extension courses. These persons, under the inspiration and direction of their lecturers, have developed a large degree of interest and intelligence in the use of books."

The extension method is adapted to the needs of persons engaged in ordinary pursuits, and is intended to stimulate as many as possible to become earnest students. The important details of the work are: (1) A systematic course of ten evening lectures (usually weekly) on a single subject, handling it with the utmost thoroughness; (2) a printed syllabus is furnished containing an analysis of the entire course and a useful bibliography; (3) a free discussion between lecturer and audience in connection with each lecture adds greatly to the interest and value of the course; (4) a list of topics is named in the syllabus for short papers of a page or more by those willing to write them. All work is of course voluntary; (5) an examination under the auspices of the regents is held at the close of each course for those who wish to take it, and regents' certificates are given those who pass; (6) persons thoroughly interested find it very helpful to form a students' club, to meet between the lectures or after the course closes, and continue the study, with the advice of the lecturer; (7) when an extension course is given in a small town where there is no adequate library, a traveling library of 50 to 100 of the best books on the subject is supplied by the State library at nominal expense.

Full courses of ten lectures each can be furnished on each of the following subjects:

In science: Biology and evolution, by Charles Wright Dodge, M. S., professor of biology; chemistry in nature and the arts, by Samuel A. Lattimore, Ph. D., LL. D., professor of chemistry; physical geology, historical geology, economic geology, comparative physiology, zoology, by Herman L. Fairchild, B. S., professor of geology and natural history; money, banking and the silver question, pedagogy, science and art of education, practical logic and popular fallacies, philosophy and evolution, by George M. Forbes, A. M., professor of philosophy and pedagogy; astronomy, electricity, light, heat, and sound, sanitary science, by Charles Forbes, B. S., M. D., extension lecturer on science; electrical engineering, forces of nature as related to modern life, by Albert L. Arey, C. E., extension lecturer on science; improved agriculture, by P. C. Reynolds, extension lecturer on agriculture; labor and capital, trusts, strikes, wages, physiology, by Harrison E. Webster, LL. D., extension lecturer; mathematics, by Arthur Latham Baker, Ph. D., professor of mathematics.

In history: Ancient Roman life, by Henry F. Burton, A. M., professor of Latin; American Revolution, American Constitution, devel-

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opment of the nation, 1789–1861, the civil war and its financial and foreign relations, by William H. Mace, M. L., M. A., extension lecturer on history; civil and religious liberty in America, European statesmen of the nineteenth century, by Regent Charles E. Fitch, LL. B., M. A.; studies in Greek life of the heroic age, Greek life in the age of Pericles, Greece and the age of Pericles, life in old Florence, by Mrs. William A. Montgomery, B. A., extension lecturer on history.

In literature: American literature, American poetry, English language, English literature, poetry of the Bible, recent English poetry, Shakespeare, by Joseph H. Gilmore, Ph. D., professor of rhetoric and English; French literature, by A. H. Mixer, A. M., professor of modern languages; Scottish writers, by William P. McKenzie, B. A., instructor in English and rhetoric.

Courses by competent instructors from other places can also be supplied on the following subjects: Chemistry of cooking, botany, heredity, science of education, discovery of America, American archæology, Spain, Mexico, making of France, mediæval France, Italian art, Greek philosophy, art, philosophy and literature of the renaissance, political methods, economic legislation, evolution of laws affecting women, ballads and songs of various countries illustrated by singing, Roman history, Roman biography, Roman antiquities.

Language classes: Kendrick P. Shedd, A. B., instructor in modern languages, will give thorough evening courses in French and German to extension classes.

All inquiries regarding university extension should be addressed to the secretary, J. Eugene Whitney, 7 Brackett House Building, Rochester, N. Y.

PROPERTY.

"With the exception of $25,000 received from the legislature of New York in 1857, the funds of Rochester University have been raised entirely by its friends and alumni."[1] Among its greatest benefactors have been Hiram Sibley, John B. Trevor, and John H. Deane. As given in the One hundred and seventh Regent's Report, the total property of the university was valued at $1,191,319, and its total income for that year (1888–89) amounted to $41,371.05.

Its library building, the gift of Mr. Sibley, is valued at $100,000, and contains about 26,000 volumes. There is about an equal number of books in the theological library, accessible to university students.

It was the firm opinion of President Anderson that the university should have no dormitories, and this wise policy has been followed, thereby preventing that sequestration of the students from society and actual life which is the bane of many of our colleges.

[1] Public Service, etc., III, 320.

STUDENTS.

An interesting tabular statement in regard to the numbers of students and the courses attended is given below:

I.—1850-1886.

Academic year.	Resident graduates.	Seniors.	Juniors.	Sophomores.	Freshmen.	Total.	Classical.	Scientific.	Eclectic.
1850-51	2	10	15	13	34	74	60	12	2
1851-52	.....	18	15	52	26	116	97	14	5
1852-53	.....	14	37	33	34	118	.....	.....	9
1853-54	3	24	18	36	40	121	.....	.....	12
1854-55	2	16	25	32	44	119	100	4	13
1855-56	6	20	22	42	47	137	107	8	16
1856-57	10	21	42	44	47	163	135	5	13
1857-58	6	25	33	45	34	143	123	4	10
1858-59	13	29	41	35	28	148	97	7	12
1859-60	15	36	34	30	38	153	118	8	12
1860-61	16	26	32	50	45	168	126	8	8
1861-62	.....	25	47	41	42	155	135	5	2
1862-63	11	41	39	44	25	160	143	5	1
1863-64	(a)	42	41	25	25	133	124	1	8
1864-65	(a)	36	23	30	19	108	104	2	2
1865-66	(a)	22	27	26	26	101	98	1	2
1866-67	(a)	24	23	33	20	100	98	2	0
1867-68	(a)	24	29	25	28	106	100	3	3
1868-69	9	26	21	34	26	116	95	8	4
1869-70	6	23	32	25	28	115	100	6	3
1870-71	4	28	24	32	33	121	105	7	5
1871-72	7	20	29	35	42	133	106	11	9
1872-73	9	25	39	42	42	157	118	13	17
1873-74	13	31	36	40	53	173	129	12	19
1874-75	21	25	37	36	37	156	121	10	4
1875-76	12	38	40	37	38	165	133	18	2
1876-77	10	37	38	42	36	163	129	19	5
1877-78	19	30	34	34	36	153	114	14	6
1878-79	11	34	30	34	37	146	103	18	14
1879-80	29	29	30	32	35	155	99	14	13
1880-81	21	30	26	32	49	158	104	16	17
1881-82	22	23	30	41	46	162	108	18	14
1882-83	12	35	34	41	47	169	126	17	14
1883-84	21	31	36	39	38	165	106	24	14
1884-85	15	35	34	30	39	153	112	23	14
1885-86	10	31	26	42	45	154	102	19	23

a Students in analytical chemistry not undergraduates.

II.—1886-1895.

Academic year.	Seniors.	Juniors.	Sophomores.	Freshmen.	Total.	Classical.	Latin scientific.	Greek scientific.	Scientific.	Eclectic.	Special.
1886-87	27	30	42	46	159	106	.....	.....	15	24	14
1887-88	25	38	36	55	172	97	.....	.....	25	32	18
1888-89	33	36	46	49	173	97	.....	.....	31	36	9
1889-90	21	19	26	37	185	103	.....	.....	7	39	11
1890-91	23	30	35	40	190	88	.....	.....	40	49	13
1891-92	40	29	29	55	185	103	41	4	5	19	13
1892-93	29	33	42	41	158	97	28	0	10	19	4
1893-94	21	33	36	56	188	105	47	4	10	31	11
1894-95	35	30	46	61	206	118	35	3	16	27	7

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NOTE.—The charter was granted by the regents. The only legislation that I know of was an act [referred to above] appropriating $25,000 to the university in case its friends raised a similar amount. To secure this appropriation General Rathbone gave us our library fund, and the State appropriation aided in the erection of Anderson Hall. This is all the State aid we ever received.—J. H. GILMORE.

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THE COLLEGE OF THE CITY OF NEW YORK, 1854.

[Furnished by the college.]

THE FREE ACADEMY.

In the year 1846 the board of education of the city of New York submitted to the legislature a petition asking for the establishment of an institution which was to give its pupils all the essentials of a collegiate education free of cost. Accordingly, on May 7, 1847, the legislature passed an act authorizing the board of education to establish a "free academy," provided a majority of the citizens favored it. The question was submitted to the people in the following June, and out of a total of 22,813 votes 19,404 were in favor of the proposed academy. In view of this large majority the board at once proceeded to carry out the provisions of the law. The site selected for the new academy was the southeast corner of Lexington avenue and Twenty-third street, and contained 15 city lots. It was next decided to establish the following departments of instruction: Moral, intellectual, and political philosophy, the professor to be at the same time principal; mathematics, history, and belles-lettres; Latin and Greek languages and literature; French language and literature; Spanish language and literature; German language and literature; English language and literature; drawing and the fine arts; natural philosophy; chemistry and physics; natural history, anatomy, physiology, and hygiene, and civil engineering.

DR. HORACE WEBSTER, PRINCIPAL, 1848.

In the summer of 1848 Dr. Horace Webster, educated at West Point, and at the time professor of natural philosophy at Hobart College, was elected principal. Soon after Edward C. Ross was appointed professor of mathematics and natural philosophy; Theodore Irving, professor of history; John J. Owen, professor of Latin and Greek; Oliver W. Gibbs, professor of chemistry; Paul P. Duggan, professor of drawing, and Jean Roemer, professor of French. The faculty was not completed, however, until 1851. On the 15th of January, 1849, the work of instruction was begun, with a class of 143 pupils. From that day to June, 1895, about 22,000 applicants have been admitted. As the examination covers only the subjects taught in the public schools, the admission has been to a preparatory class. Of the 22,000 admitted, about 8,500 have entered the freshman class, and of these about 1,700 have been graduated. The alumni are represented in every branch of public and private life, and include among their number many successful principals and teachers in the public schools, clergymen, physicians, lawyers, some of whom are judges, authors, journalists, architects, and engineers, as well as a large number of prosperous manufacturers and merchants, while not a few are instructors or professors in this and other colleges.

In 1854 the legislature granted the "academy" collegiate powers and privileges, thus enabling it to confer on its graduates the usual degrees in the arts and sciences. It was not, however, until 1866 that, on recommendation of the board of education, the name of "Free Academy" was changed to that of "The College of the City of New York." At the same time the board of education was made, ex officio, the board of trustees of the college. In 1869 President Webster was succeeded by Gen. Alexander S. Webb. Until 1872 the faculty had not been represented in the board of trustees; in that year, however, the president of the college, by act of legislature, was made a member, not only of the board of trustrees, but also of the executive committee, for the care, government, and management of the college.

From the beginning it was the intention of the founders to give more prominence than was then given in other institutions of a similar character to the modern languages, to drawing, to the sciences, and especially to English. Two courses were established, the scientific and the classical. To these courses a third, the mechanical, has since been added. These courses are alike collegiate in character, and aim at general development of the powers of the mind rather than special preparation for a particular pursuit in life. With the exception of the choice of course at the beginning, but few electives are offered to the students, and these only in the junior and senior classes.

The length of the session in each of the three courses is thirty-eight weeks, of which four are devoted to examinations. The number of recitations or lectures which the students are required to attend differs according to the course; the number in the scientific and classical is twenty, in the mechanical twenty-three, per week.

In the classical course 10 per cent of all the time is devoted to English, 17 to Latin, 12 to Greek, 13 to mathematics, 10 to drawing, and the remainder to chemistry, natural history, philosophy, history, and a modern language. The scientific course is the same as the classical in English, chemistry, natural history, philosophy, and history, but devotes more time to mathematics and drawing, and instead of Latin and Greek takes French and German or Spanish; while in the senior class it offers an option between Latin and Spanish or German. In the mechanical course the students are taught mechanical theory and the use of tools, besides most of the subjects embraced in the scientific course. In addition to the work above indicated, the department of English requires one composition or essay a month from each student in the subfreshman, freshman, sophomore, and junior classes. Besides this the juniors and seniors write two orations, which they deliver from the chapel stage, while the sophomores declaim short selections in prose or verse, these orations and declamations forming part of the regular chapel exercises.

DEVELOPMENT.

These courses are not those originally established. Great advances have been made in all departments, not only in the matter taught, but also in the methods of instruction. Old chairs have been combined or abolished, while new ones have been established. Thus, the chairs in civil engineering and natural philosophy have been superseded by a professorship in applied mathematics, the presidency has been separated from the professorship in philosophy, and separate chairs in Latin and Greek have been established. The professorship in Spanish has been entirely abolished, and instruction in that language is given by a special instructor. The steady growth in the equipment of the various departments, giving to the students every facility for pursuing their studies, has been an important factor in the general progress. This is especially true of the departments of chemistry and physics, and natural history—the former has thoroughly and well furnished laboratories, besides a cabinet of about 2,300 pieces of physical apparatus, while a museum of more than 10,000 specimens, nearly all donated by friends of the college, provides the latter with a great part of the material needed for illustration and study. The department of drawing makes use of a fine collection of casts, many of them presented by Mr. Charles M. Leupp, and a large number of photographs, the gift of the class of 1875, illustrating the architecture and sculpture of the Greeks and Romans and early Christian and renaissance painting in Italy. The departments of Latin, Greek, and history also are supplied with a large number of maps, charts, and illustrations. The latest addition to the college is the workshop used by the students of the mechanical course. It is well provided with lathes and forges and all the necessary tools.

The college library has grown steadily in usefulness. Additions have been made to it in the course of time, including the standard works in all branches of learning, and it now contains about 30,000 volumes, besides literary and scientific periodicals. It is open daily for the consultation and issue of books. Teachers of the common schools of the city, as well as the instructors and students of the college, have access to it. The books have been purchased with the money apportioned to the college, while known as the Free Academy, as its share of the literature fund of the State, from the income of $5,000 bequeathed by Mr. Ephraim Holbrook, from the income of $30,000 bequeathed by Mr. Seth M. Grosvenor, and with money which has at times been appropriated by the board of trustees. Many books have been presented by members of the faculty, graduates, and other friends of the college.

The college has from the beginning employed the marking system to record the scholarship of its students, and the usual commencement honors are also awarded on the basis of marks. A number of prizes and medals are awarded annually to incite the students to their

best efforts. They have been founded at various times by persons interested in the work of the college. The gentlemen who have established these prizes are Duncan C. Pell, Charles T. Cromwell, Augustus H. Ward, Elisha Riggs, John Claflin, James Kelly, F. W. Devoe, Alexander P. Ketchum, and James Gordon Bennett. The college is also indebted for gifts to the Smithsonian Institution and to the following gentlemen: E. G. Blackford, W. H. Chesebrough, Edward Cooper, Bashford Dean, Prof. R. O. Doremus, David Dudley Field, Townsend Harris, Nathaniel Jarvis, jr., Dr. Isaac Lea, of Philadelphia, Lieut. Col. Walter McFarlane, U. S. A., H. J. Muller, H. R. Remsen, William T. Rodenbach, Jackson Steward, Gen. Alexander S. Webb, William Wood, Prof. Solomon Woolf, and Louis Zerega.

As the college has advanced in every other direction, so it has also grown in popular favor, a fact clearly demonstrated by the largely increased attendance. In 1869, when Dr. Webster resigned the presidency, and Gen. Alexander S. Webb, like Dr. Webster, a graduate of West Point, was chosen as his successor, the number of students enrolled in the five classes was 786, while the number of instructors was 29. In the year 1895 these numbers were almost doubled, there being 1,351 students and 53 instructors, besides the president. The number of graduates has increased in the same ratio, the average number of graduates for the last few years having been somewhat over 60, while the class of 1896 will probably graduate more than 80. The number of students has become so large that increased accommodations have become an absolute necessity. The legislature recognized this fact by passing this year (1895) a bill providing for the acquisition of a new site and for the erection thereon of suitable buildings. The site has already been selected. It includes the plot of land from One hundred and thirty-eighth street to One hundred and fortieth street, and from Convent avenue to Amsterdam avenue, containing in all 56 city lots. The college will probably celebrate its fiftieth anniversary in its new home.

With the exception of the few funds above mentioned the college is supported by the city. The sum annually required for this purpose in 1869 and for several years before was $115,000. At present, because of the large increase of students and instructors, $150,000 are allowed annually.

The faculty, consisting of the president and twelve professors, have the general direction and superintendence of everything pertaining to instruction in the several departments. They are assisted in the work of instruction by a corps of instructors and tutors. The members of the faculty at present are: Alexander S. Webb, LL. D., president; Robert Ogden Doremus, M. D., LL. D., vice-president and professor of chemistry and physics; Adolph Werner, Ph. D., professor of German; Alfred G. Compton, A. M., professor of applied mathematics; Charles G. Herbermann, Ph. D., LL. D., professor of Latin;

Solomon Woolf, A. M., professor of drawing; Fitz Gerald Tisdall, Ph. D., professor of Greek; James W. Mason, A. M., professor of pure mathemathics; Henry Phelps Johnston, A. M., professor of history; William Stratford, M. D., Ph. D., professor of natural history; Casimir Fabregon, A. M., professor of French; George E. Hardy, A. M., professor of English; ——— ———, professor of moral and intellectual philosophy.

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Acts of the Legislature.

1. Laws of 1847, chapter 206. An act authorizing the board of education of the city and county of New York to establish a free academy in said city.
2. Laws of 1866, chapter 264. An act to erect the free academy of the city of New York into a college.
3. Laws of 1866, chapter 637. An act directing the board of supervisors of the county of New York to raise $125,000 annually for the maintenance of the college, and directing the trustees of the college to select a suitable site upon the lands of the corporation of the city of New York, north of Fortieth street in said city, for the future use of the college.
4. Laws of 1872, chapter 471. An act increasing the annual appropriation to $150,000.
5. Laws of 1872, chapter 681. An act making the president of the college a member of the board of trustees and of the executive committee of the board.
6. Laws of 1882, chapter 143. An act to open the college to all male persons residing in the city of New York who shall pass the prescribed examination for admission (doing away with the requirement of one year's attendance in a common school).
7. Annual reports to the regents.

THE ST. LAWRENCE UNIVERSITY, 1856.[1]

By N. L. ROBINSON, B. A. (St. Lawrence and Harvard.)

St. Lawrence University, John Clarence Lee, Ph. D., D. D., president: college of letters and science—Canton theological school.

SEAL OF THE UNIVERSITY.

Arms, Gules, cross bottony Argent; quartered with Sanguine, open book Argent; edges, covers, and clasps Or.

The seal contains a shield with the arms on a circular field Or, on which is the motto fides et veritas Gules, and on the rim the words VNIVERSITAS SANCTI LAVRENTII IN NOV. EBOR. MDCCCLVI.

The college colors are scarlet and brown.

The St. Lawrence University was chartered April 3, 1856, for the purpose, as stated in the act of incorporation, "of establishing, maintaining, and conducting a college in the town of Canton, St. Lawrence County, for the promotion of general education, and to cultivate and

[1] The writer is indebted to Rev. Dr. T. J. Sawyer, of Tufts College, to Dr. F. S. Lee, of Columbia College, and to Prof. C. K. Gaines, of St. Lawrence, for valued assistance in the preparation of this sketch.

advance literature, science, and the arts; and also to establish and maintain a theological school and department in Canton aforesaid." As at present organized it embraces the college of letters and science, the theological school, and the library. The two schools are independent of each other in their faculties and funds and in the instruction and government of their students. The library is under the joint control of the schools. A law school was established in 1869 and graduated two classes, but was discontinued in the fall of 1871. A plan for its revival is now being considered. A field of 26 acres, on which the present college hall had been erected by the Universalist Educational Society for the use of a Universalist theological school, was transferred by the representatives of that society to the university in 1857, and during the same year the State appropriated for the college $25,000, of which $10,000 were to be expended for "books and apparatus," and $15,000 were to be kept as a permanent fund, on condition that an additional sum of $25,000 should be raised for its endowment by its friends. With this modest equipment it began. It has struggled with poverty throughout its career, but has grown slowly and sturdily to a respectable rank among the colleges of the State. From its foundation the by-laws have provided that the college of letters and science should remain unsectarian in its teachings and influence.

The charter trustees were Rev. Thomas J. Sawyer, D. D., Jacob Harsen, M. D., Rev. William Stephens Balch, Frederick C. Havemeyer, and Thomas Wallace, of New York; United States Senator Preston King, of Ogdensburg; Sidney Lawrence, of Moira; George C. Sherman and Rev. Pitt Morse, of Watertown; Francis Seger, of Utica; James Sterling, of Sterlingville; Caleb Barstow and Norman Van Nostrand, of Brooklyn; Josiah Barber, H. W. Barton, and Rev. John M. Austin, of Auburn; Rev. Lewis C. Browne, of Honeoye Falls; George E. Baker, of Albany; Peter H. Bitley, of Branchport; Rev. George W. Montgomery, of Rochester; and Hon. John L. Russell, Martin Thatcher, Barzillai Hodskin, Levi B. Storrs, and Theodore Caldwell, of Canton. Though not trustees, Rev. Dr. Edwin H. Chapin and Horace Greeley were among the founders of the university.

The presidents of the corporation have been:

Thomas Jefferson Sawyer, D. D	1856–1867
Martin Thatcher, esq	1867–1868
Richmond Fisk, D. D	1868–1871
Jonas Sheldon Conkey, M. D	1871–1883
Arthur Guinness Rogers, D. D	1883–1887
Edwin Atkins Merritt, LL. D	1887–

The corporation consists of 24 members.

The Theological School was opened in April, 1858, by Rev. Ebenezer Fisher, D. D., who remained at its head until he died in his lecture room February 21, 1879. Its first class, of five members, was graduated in 1861. During Dr. Fisher's administration the school was per-

manently endowed, and achieved a wide reputation as the first and leading Universalist theological school in America. More than 150 men passed from his training into the Christian ministry. He was succeeded as president and Dockstader professor of theology and ethics by Rev. Isaac Morgan Atwood, D. D., its present head, under whose care its endowment has been doubled, while its standard of education has steadily improved. Other professors have been: Massena Goodrich, M. A., Biblical languages and literature, 1861–1863; Orello Cone, D. D., now president of Buchtel College, Craig professor of Biblical languages and literature, 1865–1880; John Stebbins Lee, D. D., Moore professor of ecclesiastical history and archæology, 1869—; Henry Prentiss Forbes, D. D., Craig professor of Biblical languages, 1881—; Lewis Beals Fisher, Ryder professor of pastoral theology, 1891—.

Edwin Cortland Bolles, Ph. D., D. D., Alpheus Baker Hervey, Ph. D., William Augustine Poste, M. A., Oscar Fitzalan Safford, D. D., Adoniram Judson Patterson, D. D., William Henry Ryder, D. D., George Landor Perin, D. D., John Coleman Adams, D. D., Alonzo Ames Miner, D. D., LL. D., and Charles Henry Eaton, D. D., have been lecturers in the Theological School. Rev. Dr. Ryder died in 1888, and made the school one of the five residuary legatees of his estate. Thus far $32,808.40 have been received from his bequest. The course of study leading to the degree of Bachelor of Divinity requires four years, but most of the students pursue a three years' course, for which a diploma is given.

In April, 1859, an academic department was opened by Rev. John Stebbins Lee, D. D., a graduate of Amherst College, as principal and professor of the Latin and Greek languages. Dr. Lee continued at its head until 1868, and in 1869, after a year abroad, was called to the chair of church history in the Theological School, which he still holds. He was assisted in his work in the College by John White Clapp, M. A., an honorary graduate of Amherst, who was professor of mathematics until 1865. Professor Clapp was succeeded by Nehemiah White, Ph. D., D. D., lately president of Lombard University. Dr. White had charge of the mathematical department until 1871. At the beginning of Dr. Lee's administration the work in the academic department was wholly preparatory, but subsequently classical and scientific courses of study, similar to the ordinary courses in the New England colleges of that period and leading to the degrees of B. A. and B. S., were laid out and were entered upon by a number of the students. In 1865 was graduated the first college class, consisting of Hon. Hiram Henry Ryel, of the Lewis County bar, and Hon. Delos McCurdy, of the New York City bar. Hon. Pardon C. Williams, of Watertown, justice of the supreme court, and Mr. Leffert L. Buck, of New York, a civil engineer of distinction, left college before graduation, Mr. Buck to serve the Union in the civil war, and have since received their degrees *nunc pro tunc* as of the year 1863.

INTERIOR OF LIBRARY.

ST. LAWRENCE UNIVERSITY—COLLEGE HALL.

Rev. Richmond Fisk, D. D., a graduate of Union, was elected president of the college in 1868, and served for three years. On his accession the preparatory school was discontinued, and only college work has since been done in this department.

Dr. Fisk was succeeded in 1872 by Rev. Absalom Graves Gaines, D. D., LL. D., a native of Kentucky, educated at the University of Virginia. To the strong brain, sound scholarship, uprightness and purity of character, and persevering unselfish devotion of the latter is largely due the establishment of the college on a firm foundation. A man of earnest convictions and marked individuality, his influence in molding both intellectually and morally the minds of his pupils has been notable. Resigning on account of illness in 1888, Mr. Gaines was succeeded as president in 1889 by Rev. Alpheus Baker Hervey, Ph. D., but retained his chair as Craig professor of psychology and ethics, and political economy, and is now fully restored to health. President Hervey is a graduate of the university and held the Cummings professorship of natural science. He resigned in 1894. During his administration the number of students and the funds were largely increased.

Among the professors and instructors in the college of letters and science have been Moses Marston, Ph. D., late professor of English literature in the University of Minnesota, Latin and Greek, 1868–1873; William Alexander Rich, LL. B., D. D., Latin and Greek ad interim, 1871–72; James Henry Chapin, Ph. D., geology and mineralogy, 1871–1892; John Stocker Miller, M. A., LL. B., Latin and Greek, 1871–1874; Almeron Zenas Squires, M. A., LL. B., mathematics, 1872–1880; Walter Balfour Gunnison, Ph. D., Latin language and literature, 1875–1885; Bernhard Jaques Pink, M. A., LL. B., modern languages, 1875–1882; Charles Kelsey Gaines, Ph. D., Greek language and literature, and English literature, 1876—; Henri Hermann Liotard, M. A., modern languages, 1882—; Henry Priest, M. A., Hayward professor of mathematics and physics, 1883—; Clement Morelle Baker, M. A., Latin language and literature, 1885–1892; Frederic Schiller Lee, Ph. D., physiology and biology, 1886–87; Robert Dale Ford, M. S., mathematics, 1887–1890; George Robert Hardie, M. A., Latin language and literature, 1892—; Ceylon Samuel Kingston, B. A., mathematics, 1892–93; Everett Alberton Pugsley, B. A., English and history, 1893–94; Warren Gardner Bullard, B. A., mathematics, 1893–94; George Daniel Hammond, B. A., history, 1894—; Edward Payson Manning, Ph. D., mathematics, 1894—.

The professors in the law school were Leslie Wead Russell, LL. D., lately attorney-general of New York, property, 1869–1871; William Christopher Cooke, practice, 1869–70; Stillman Foote, M. A., contracts, 1869–1871.

The requirements for admission to the college and the courses of study leading to the degrees of B. A., B. S., Litt. B., and Ph. B. are

of essentially the same grade as in the best colleges of the State. Instruction is offered at present in: Greek, 6 courses; Latin, 9 courses; German, 6 courses; French, 6 courses; English, 11 courses; rhetoric, 2 courses; parliamentary debate, 2 courses; mathematics, 6 courses; physics, 4 courses; chemistry, qualitative analysis, 2 courses; chemistry, quantitative analysis, 2 courses; physiology, 1 course; biology, 2 courses; geology, 1 course; mineralogy, 1 course; astronomy, 2 courses; history, 8 courses; economics, 2 courses; psychology, 2 courses; logic 2 courses; ethics, 1 course; evidences of religion, 1 course.

During the freshman and sophomore years a greater part of the work is prescribed; for the upper classmen it is chiefly elective. A course of four years is required for the bachelor's degree. Since 1886 the master's degree has been conferred only on examination and the completion of regular courses of not less than one year. After 1895 honors will be awarded at graduation to candidates whose scholarship reaches a high degree of excellence. It is intended that honors shall be given only where warranted by the standard of the best American universities.

The beneficial effect of its training is seen in the earnestness with which large numbers of the graduates continue their studies in professional schools and at leading American and foreign universities. It is, however, greatly to be desired that adequate provision be made for the erection and endowment of special chemical, physical, and biological laboratories and for instruction in the fine arts.

The library contains about 11,000 volumes, catalogued according to improved methods, several thousand pamphlets, and a few valuable paintings and other works of art. It is open daily and is used constantly by the students and the public. Although it comprises many rare and costly books, including the Loveland collection and the library of the late Prof. C. A. Credner, of the University of Giessen, rich in theological works, especially of the early decades of the sixteenth century, it has of late been largely dependent for accessions upon the gifts of friends, and its wants are manifold. Since the loss of the income formerly supplied by the generosity of Mr. S. C. Herring it has had for the purchase of books only the income of a fund of $1,000, the gift of a friend who prefers to remain unknown. A fund of $25,000 is greatly needed. There are also several classroom reference libraries. Private libraries containing from 15,000 to 20,000 volumes are open to the students.

The university is well situated in a region at once attractive and remarkable for healthfulness, with spacious grounds on a hill overlooking the village of Canton, the shire town of St. Lawrence County. With abundant facilities for recreation, the students are peculiarly free from undue distraction in their work, and are prompted to industry by every legitimate incentive. The unavoidable temptations to vice and dissipation are here at a minimum, and are utterly

discountenanced, not merely by the discipline of the college, but also by the general sentiment of the students and of the neighborhood. The university buildings are College Hall, of brick, 45 by 100 feet, four stories high, erected in 1856; Herring Library, a fireproof structure of Potsdam sandstone, with a capacity for 60,000 volumes, built by the late Silas C. Herring, of New York, in 1870; Fisher Hall, a substantial edifice of Canton marble, erected in memory of President Fisher by the alumni in 1882 for the use of the theological school; and a president's house, of brick, erected by President Atwood in 1887. They stand in the middle of the college field, which is adorned with native trees and is ample for the future growth of the university.

The students maintain two public debating societies, one in each school, holding weekly meetings; two reading rooms; an athletic association, which celebrates an annual field day, and various boating, baseball, football, and tennis clubs. There are five Greek-letter societies and a brotherhood, several of which occupy comfortable club houses. The Laurentian Publishing Company issues The Laurentian, a monthly undergraduate journal devoted to the interests of the university. The Canton Liberal, a monthly, is published by undergraduates of the divinity school. About 40 free scholarships in the college of letters and science have been established in the various schools of St. Lawrence County and northern New York, in the Clinton Liberal Institute at Fort Plain, and by private donors. These produce an income of from $50 to $240 each. The total necessary expenses of each student average from $175 to $350 per year. Many without means work their way through college by teaching and in other ways, and graduate free from debt. From the first women have been admitted to all the privileges of the university and number about one-fifth of its graduates.

The university has received no aid from the State since the first grant of $25,000. Its benefactors have been many. Among them may be mentioned Charles A. Ropes, of Salem, Mass., whose gift of $5,000 in 1865 saved the theological school from suspension; Augustus C. Moore, of Buffalo, a charter trustee, who gave $25,000 to the theological school; John Craig, of Rochester, from whose bequest each school received $25,000 in 1873 for the endowment of a Craig professorship; Alvinza Hayward, of California, a native of Canton, who endowed the Hayward professorship of mathematics and physics in the college with $30,000 in 1874; George A. Dockstader, of New York, who gave $10,000 to endow the Dockstader professorship in the theological school; Mrs. Lorena Bicknell, of Stockholm, who left $10,000 to the college in 1873; Thomas A. Goddard, of Boston, who left $3,000 to the theological school; Miss Sarah A. Gage, of Hudson, who left $37,456 to the theological school; Lester Taylor and wife, of Fly Creek, who left $4,000 to the theological school; Rev. William H. Ryder, D. D., of Chicago, whose bequest of $32,808.40 has already been mentioned; Mrs. Abby M. Simmons, of Victor, who bequeathed

$5,000 to the college in memory of her husband, the late Richmond Simmons, esq.; Dr. Joseph W. Clowes, of New York, who gave $5,000 to the college in a time of serious need; the Hoyt and Watson families, of Sennett, from whom it has received four different legacies; the late P. T. Barnum, who gave it $6,000; George C. Thomas, of Philadelphia, a generous friend, who gave the college $5,000; the late David I. Stagg, of New York, under whose will the theological school received $5,000; Mrs. Mary Gunn, who gave $2,000 to the theological school; Lyman Bickford, of Macedon, who has given over $4,000 to the college and over $1,000 to the theological school; Mrs. Harriet Lewis, of Meriden, Conn., who has given upward of $5,000 to the college; and Mrs. Kate L. Chapin, of Meriden, who has endowed with $30,000 the Chapin professorship of geology and mineralogy in memory of her husband, for many years a loved and honored member of the college faculty.

Previously to 1885 it was the practice of the trustees to pay the current expenses of the college of letters and science out of the funds, as the school had never been adequately endowed. It was the opinion of the then lately elected treasurer, Mr. George Robinson, that this policy was unsound, and that an endowment should be obtained. Accordingly, in June, 1885, the corporation voted to expend no more of the funds for any purpose, and thereafter to confine the expenditure of the university to its income. At that time the funds of the college amounted to barely $50,000. The wisdom of this action is shown by the fact that they now (March, 1895) amount to nearly $200,000. A plan, suggested by the treasurer, for raising a fund of $50,000 by means of interest-bearing subscriptions, payable in five annual payments, was adopted. A vigorous canvass was conducted by the officers and friends of the university, assisted by the county press, with such success that the sum of $50,508 was raised before November 30, 1887, without expense to the institution. About one-fourth of the whole sum was contributed by alumni and considerably more than one-half by citizens of St. Lawrence County. The undergraduate students, many of whom were working their own way through college, gave upward of $1,000. The names of the subscribers to this fund, over 400 in number, are engrossed upon parchment and hang in Herring Library. Immediately thereafter the raising of another $50,000 was begun under the supervision of President Hervey, and was completed in 1889 by the gift of $25,000 by Columbus R. Cummings, esq., a native of Canton, now of Chicago, to establish the Cummings professorship of natural science.

The property of the university may be summarized as follows:

Total endowment fund	$337,357.61
Buildings and grounds	100,000.00
Collections	20,000.00
Total property of university	457,357.61

The foregoing estimate does not include legacies and gifts announced but not yet received.

The funds are nearly all invested in bonds and mortgages on real estate. About $31,000 are held in corporate bonds. The policy of the university is to keep entirely free from debt, to incur no expense until the means are provided for paying it. The endowment of the college of letters and science ought to be three or four times its present amount in order to provide for the present needs of the college. St. Lawrence is the only college in the State north of the line of the Erie Canal, and is situated at about the middle of a fertile belt with a population of over 350,000, to whose youth it offers the only means of obtaining a liberal education without going a considerable distance from home. Probably a large majority of its graduates would never have gone to college had not St. Lawrence been at their doors. Upon the welfare and growth of the university the interests of higher education in this part of the State are largely dependent.

GENERAL SUMMARY.

The present teaching force is as follows:

College	8
Theological school	6
	14
Officers of administration	5
Trustees	24

The whole number of students in 1894–95 was:

COLLEGE.		THEOLOGICAL SCHOOL.	
Graduate students	18	Graduate students	4
Seniors	15	Seniors	6
Juniors	26	Middlers	10
Sophomores	16	Juniors	8
Freshmen	32	Special	6
Special	11	Total	34
Total	118		

Whole number of students in university 152

The whole number of graduates was 549, classified as follows:

	Number.	Dead.	Living.
Bachelors of arts	73	2	71
Bachelors of science	180	9	171
Bachelors of philosophy	15	0	15
Bachelors of laws	15	4	11
Bachelors of divinity	14	0	14
Graduates in theology	206	20	186
Civil engineer	1	0	1
Masters of arts on examination	4	1	3
Masters of science on examination	4	0	4
Doctor of philosophy on examination	1	0	1
Honorary graduates	36	7	29
Total	549	43	506

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A discourse occasioned by locating a Universalist seminary in Canton, N. Y., delivered in the First Presbyterian Church, Sunday, April 6, 1856. By J. R. Hale. 8vo. Pp. 47. Boston, 1856.

A curious sermon in which subscribers to the fund for securing the proposed school, belonging to orthodox churches, are advised not to pay their subscriptions. By invitation of the First Presbyterian Society, President Hervey was inaugurated and the commencement exercises of the university were held in this church in 1889.

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The same. Canton, 1871. 16mo. Pp. 10.

Statement of facts and reasons in behalf of the Universalist Theological School at Canton, N. Y. Canton, 1860. 8vo. Pp. 13.

An interesting pamphlet prepared by Dr. Fisher, containing much information in regard to the early history of the school.

Laws and regulations of St. Lawrence University. Canton. 12mo.

Circulars, with statement of courses, etc. 1859, 1866, 1868, 1871. The earlier issued in lieu of a catalogue.

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Triennial catalogues. Canton. 8vo. 1876. 1879. Quinquennial catalogues. 1885. 1890.

The St. Lawrence Plaindealer. Weekly. Canton. Folio. 1856. The 38 volumes of this journal, issued since the founding of the university, contain almost weekly references to the institution, and form an invaluable record of its history and growth.

Scrapbooks kept by the Beta Theta Pi fraternity. Canton. 4to. These contain newspaper clippings, programmes, and other printed matter of interest. At present in four volumes.

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ALFRED UNIVERSITY, 1857.

This institution, at first a school in the hands of the Seventh Day Baptists, was incorporated by the regents as Alfred Academy in 1843, and[1] "on the 28th of March, 1857, a university charter, to be so grafted onto the Alfred Academy as seemed best, was granted by the legislature."

This sudden evolution was due largely to the energy and zeal of President Kenyon, who had had charge of the school since 1839. He was made president of the college in 1857.

PRESIDENT KENYON.

President Kenyon's whole life, from his early struggles with poverty, when in a machinist's shop he "turned out iron and Latin paradigms together," through his fine work in organizing the Alfred Academy and up to his honored death, seems to have had something of a tinge of heroism in it. He stamped his individuality on the institution which represents his life work.

Its history is no less closely connected with the life of Dr. Kenyon's successor, Rev. J. Allen.

THE REV. J. ALLEN, D. D., LL. D., PH. D.

An interesting fact regarding these two men is recorded in "The Alfred University" for June, 1889:

> One of the first acts in the process of organizing the university under its new charter was the election of Professor Allen as its president. This honor he modestly declined, preferring to serve the school in the capacity of a teacher rather than as its head. Prof. William C. Kenyon, whom no student at Alfred for the first thirty years of its history will ever forget, was elected president in his place. Professor Allen continued to teach and to serve the institution as general or financial agent until the ill-health of President Kenyon compelled him to resign

[1] Lee memorial address, "Life and Labors of President Kenyon," commencement, July, 1867.

in 1866, when Professor Allen was again chosen president, in which capacity he has served uninterruptedly until the present time, a period of twenty-three years.

THE COURSES OF INSTRUCTION.

The following departments are open to students, both men and women:

1. Preparatory department.
2. Department of the liberal arts, philosophy, and didactics, affording complete instruction in the classical, philosophical, scientific, literary, and normal courses.
3. Department of business, with courses in penmanship, stenography, typewriting, bookkeeping, commercial transactions, and banking.
4. Department of music, with full courses in vocal and instrumental music, composition, etc.
5. Department of the fine arts, embracing drawing, sketching, crayoning, painting, clay modeling, and china decorations.
6. Department of industrial mechanics, including mechanical, architectural, and machine drawing.
7. Department of theology.

DEGREES CONFERRED BY THE UNIVERSITY.

Bachelor of Arts, Bachelor of Science, Bachelor of Literature, Bachelor of Philosophy, Bachelor of Industrial Mechanics, Bachelor of Civil Engineering, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Accounts, Bachelor of Education, Bachelor of Divinity.

STATISTICS OF INSTRUCTORS, STUDENTS, AND PROPERTY.

Faculty	17
Students	146
Net property	$287,749

THE COLLEGE BUILDINGS

Consist of the university hall, chapel, theological hall, a building for the English department, the observatory, a fine gymnasium, the Kenyon memorial hall of natural history, and the cabinet of archaeology and art. The institution is well equipped with scientific apparatus and has good collections of archaeology, paleontology, etc. The library contains about 7,000 volumes and receives yearly additions.

The death of President J. Allen occurred September 21, 1892. Prof. A. B. Kenyon then served the institution as acting president until April, 1893, at which time Rev. Arthur E. Main, of Ashaway, R. I., was elected president and entered at once upon the duties of the office.

After two years' service his resignation was accepted, to take effect with the close of the school year, June 20, 1895.

At the annual trustee meeting held June 18, 1895, Rev. Boothe Colwell Davis, of Alfred, N. Y., was chosen president. He entered upon his duties as president with the opening of the school year, September 10, 1895.

The university is in a prosperous condition. Its attendance is increasing; and in the past year it has greatly increased the facilities for work in various departments. New quarters have been provided for both the physical and chemical laboratories.

In the past five years more than $80,000 have been added to the endowment funds of the university.[1]

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3. Decennial register, 1886.
4. The Alfred University, a well-edited college paper with a motto:

   There is nothing great in this world but man, and nothing great in man but mind.

5. Laws of 1857, chap. 190, charter. Laws of 1859, chap. 77, amended.

ST. STEPHEN'S COLLEGE, 1860, ANNANDALE.

By the Rev. ROBERT B. FAIRBAIRN, D. D., LL. D., *Warden of the College.*

St. Stephen's College, Annandale, is beautifully situated on the Hudson River, opposite the Catskill Mountains. It was founded in 1860 by the diocese of New York as a training college for the ministry of the Protestant Episcopal Church. It is wholly a literary college, in which men are trained in Latin, Greek, mathematics, mental and moral philosophy, and astronomy and natural philosophy, in logic, rhetoric, and history. In the colleges which to-day are dividing their curriculum into numerous courses this course at St. Stephen's would form one course. The whole course is an elective one, which is intended to meet the wants of young men who have determined on studying for the sacred ministry. It is these studies especially that should engage their attention as affording the best preparation for entering on the study of theology at a theological seminary.

Another object in view was that it might afford an education at a lower rate of expense. The charges for board and for everything pertaining to living at the college are $225. There are many scholarships which are furnished by the Society for Promoting Religion and Learning in the State of New York. They are given an examination. Those whose marks are between 70 and 85 receive $100, and for marks between 85 and 95 they receive $200, and those whose marks are above 95 receive $300, the last paying the college bills and giving $75 over for personal expenses.

Of those who have graduated bachelor of arts nearly 200 have received holy orders, while a few, about 20, have given themselves to other professions, such as medicine and law. It is open to young men

[1] Extract from a letter written by President Davis October 8, 1895.

of the neighborhood without respect to the profession which they have in view, as, indeed, it is to any when there is room for them.

The number of students in 1890 was 81. The previous four years as many had to be declined as have been received. Could all be provided for who apply, instead of there being 81 there would be 150 students.

The buildings consist of three, which contain dormitories for 80 students, a dining hall, a library, an observatory, the Ludlow and Willink hall, the residence for the head of the college (called, after the English fashion, warden), and a chapel, which is also open for the neighborhood as a parish church. The buildings cost about $150,000. Also $5,000 have been received toward a fireproof library building.

There are 8,000 volumes in the library, and the important reviews are received. The library is open every afternoon for the use of the students and as a reading room.

The college has received toward endowment the past three years $66,000, of which fifty and more thousand have been received from the Rev. C. F. Hoffman, D. D., of New York.

The graduates of the college are brought into competition in the theological seminary with those of the large colleges, such as Columbia, Yale, and Harvard, but they have shown their scholarship in taking the prize in their special department, the Greek Testament, and in other subjects pertaining to the study of theology. The special training has shown its fruits, as it has been necessary that it should in these days when Greek is treated as a fetich, and science and kindred studies have displaced those which are considered necessary for the clerical office.

Already some of the persons educated at St. Stephen's have distinguished themselves, and have justified the diocese of New York in founding and sustaining such a college.

COLLEGE OF ST. FRANCIS XAVIER, 1861, NEW YORK CITY.

This college was first incorporated by the regents in 1861, although it had already done ten years' work in the interests of education. In 1870 it received an amended charter.[1] It is conducted by the fathers of the Society of Jesus. The predominance of the church idea is noticeable not only in its curriculum, but also in the fact that the Society of Jesus has undertaken to furnish professors and tutors without pay beyond support. There are five distinct departments—preparatory, commercial, grammar, collegiate, and postgraduate. The usual collegiate degrees are conferred. The postgraduate course, leading to the degree of master of arts, occupies only one year.

The first president of St. Francis Xavier College was the Rev. John

[1] Laws 1870, chapter 46.

Ryan, S. J. Its present president is the Rev. Thomas E. Murphy, S. J. The total number of instructors is 29. The number of students in 1893 was 90.

The college is supported entirely by donations. It has received no help from the State. Its net property amounts to $378,372.

MANHATTAN COLLEGE.

[Sketch furnished by the college.]

I. HISTORY.

Manhattan College, situated in Manhattanville, New York City, was organized in 1853 under the name of "The Academy of the Holy Infancy." After careful and diligent study, a site overlooking the Hudson River and remarkable for beauty and convenience, was selected for the proposed building. The Most Reverend Archbishop Hughes took an active part in the foundation of the academy and during his life was a zealous promoter of its interests.

The rising institution was taken charge of by the Brothers of the Christian Schools, a society of teachers which had already obtained in Europe a reputation for successful teaching. Under their skillful management the academy entered on a prosperous career, and after ten years' trial of its resources and stability, it was incorporated and chartered as a college by the University of the State of New York, under the name of Manhattan College, with power to grant all the usual degrees. The board of trustees, as at first constituted, consisted of 18 distinguished men of New York City, among whom were: Eugene Kelly, L. Silliman Ives, Henry L. Hoguet, Edward C. Donnelly, Edward J. Sears, and John E. Develin.

Manhattan College received as its first president, Brother Patrick, who had previously filled the position of director of the academy. Under his energetic and enlightened management a rapid development took place and soon Manhattan College successfully rivaled many older fellow colleges.

The second president, elected in 1873, was Brother Paulian. During his presidency an extensive addition to the college buildings was made in order to meet the increased demand for accommodation.

In 1879 Brother Anthony became president, and in 1886 Brother Justin, who now fills the chair.

II. DISTINGUISHED MEN.

Brother PATRICK was born in Ireland in 1822, and came while young to this country. The progress he made in studies, and his aptitude for administration secured him the position of director of a school in St. Louis. The office of director of the Academy of the Holy Infancy

having become vacant in 1861, Brother Patrick received the nomination. His chief care was to have the institution chartered as a college. This was effected in 1863 and Brother Patrick became first president of Manhattan College. He governed the college with universal satisfaction till 1873 when he resigned to devote himself to the work of superintending the schools of America which are under the management of the Brothers of the Christian Schools—a position which he still fills.

Brother PAULIAN.—Born in Ireland in 1831, he first distinguished himself as a professor in St. Louis. On the retirement of Brother Patrick from the presidency of Manhattan College in 1873, Brother Paulian was called to fill that office. Such was the confidence inspired by his prudent management that he was authorized to make an extensive addition to the college buildings. He, however, resigned in 1879 to become president of the Brothers' College of St. Louis, the scene of his former labors. This position he still fills with dignity and efficiency.

Brother ANTHONY, third president of Manhattan College, was born in 1841 in Rochester, N. Y. His scholarly acquirements drew on him the attention of the college, and in 1870 he was appointed professor of belles lettres. The presidency becoming vacant in 1879, by the resignation of Brother Paulian, he was unanimously chosen for that position. He, however, resigned in 1886 to take charge of an institution in Buffalo, N. Y.

L. SILLIMAN IVES.—Born in Meriden, New Haven County, Conn. Having completed his studies he was ordained in the Protestant Episcopal Church and became bishop of North Carolina. In 1852 he joined the Roman Catholic Church. He founded the New York Catholic Protectory, and was one of the first petitioners for the incorporation of Manhattan College and was the first chairman of the board of trustees, which position he occupied till his death in 1867.

EDWARD I. SEARS.—Born in Ireland in 1824; was a contributor to the Dublin University Magazine, and other magazines. In 1860 he became editor of the National Quarterly Review. He was one of the eighteen petitioners for the incorporation of Manhattan College and was elected secretary of the board of trustees which position he filled till his death in 1876.

JOHN E. DEVELIN.—Born in 1820; was educated in Georgetown College, District of Columbia. He occupied a distinguished position in the legal profession. He became chairman of the board of trustees of Manhattan College in 1867 and was an able supporter and the legal adviser of the college till his death in 1888.

III. SCOPE.

Manhattan College is a college of liberal arts. Its graduates, owing to the systematic training they receive, find ready access to the

various professions—law, medicine, and the sacred ministry. Its aim has always been to give young men a liberal and Christian education, and to make useful members of society and good citizens of our country. Nor have its efforts been in vain. Young men trained in Manhattan College are to be found in all the walks of life.

In late years, attentive to the wants of young men, the college opened a department of practical science, and students who pass duly through this course receive the degree of bachelor of science.

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CORNELL UNIVERSITY.

AN HISTORICAL SKETCH OF ITS FIRST THIRTY YEARS, 1868–1898.

By ERNEST W. HUFFCUT, professor of law in Cornell University.

I would found an institution where any person can find instruction in any study.—EZRA CORNELL.

I.

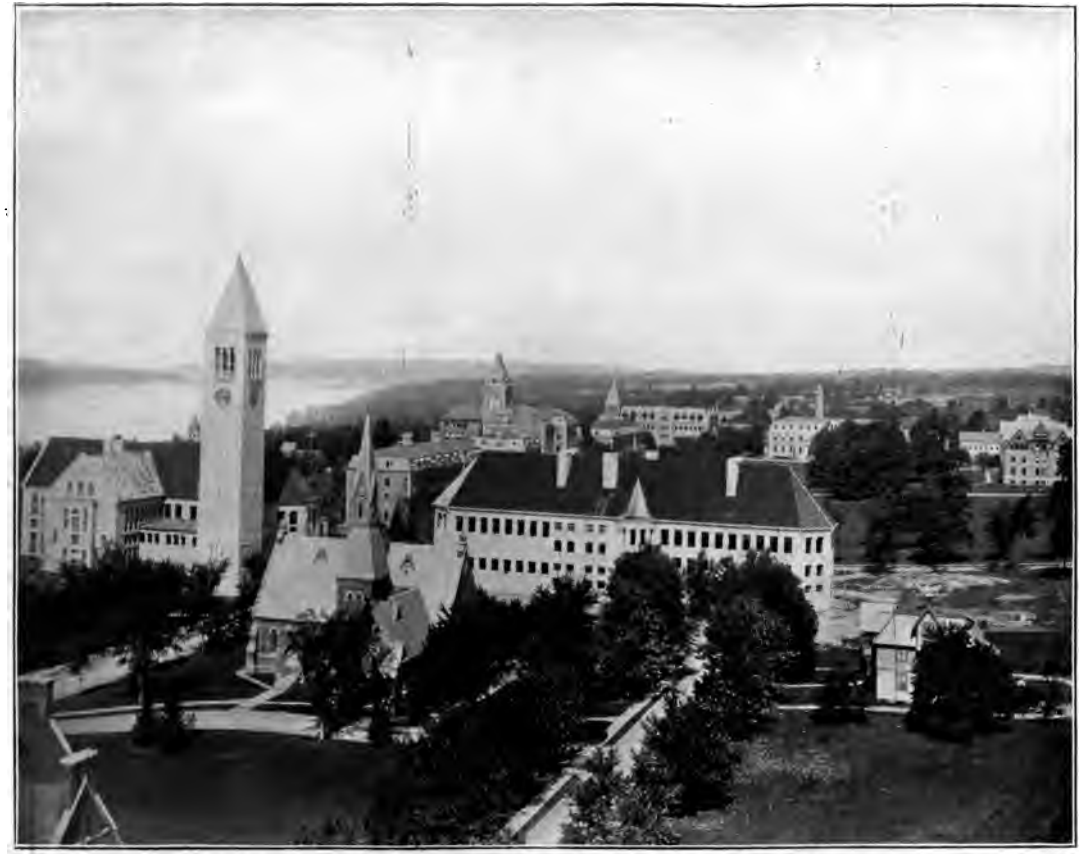
THE FEDERAL LAND GRANT AND THE PEOPLE'S COLLEGE.

THE FEDERAL LAND GRANT.

At a moment when civil war was threatening the existence of the nation, the Hon. Justin S. Morrill, of Vermont, introduced in Congress a measure whose peaceful and far-reaching results can not even yet be estimated. The purpose of the bill was to endow in each State at least one college whose object should be, "without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life."[1] For the accomplishment of this purpose the act granted to each State an amount of land equal to 30,000 acres for each Senator and Representative in Congress. In States in which there were public lands subject to sale at private entry at $1.25 per acre, the lands were to be selected within the limits of the State claiming the grant; to each State in which there were no such public lands the Secretary of the Interior was to issue land scrip representing the amount to which the State was entitled. This bill became a law by the approval of President Lincoln on July 2, 1862.

Under the provisions of this act New York became entitled to scrip representing 990,000 acres of land. The State in fact received 6,187 pieces of scrip of 160 acres each, representing 989,920 acres; the difference of 80 acres being due to the fact that no scrip was issued for less amount than 160 acres. The State itself was prohibited by the terms of the land-grant act from locating the lands within the limits of any other State, and as there were no lands subject to entry in New York the sale of the scrip was the only means of realizing on the grant.

[1] Public Laws of the United States, 1862, chapter 130. Mr. Morrill had previously introduced a similar bill in 1857, which passed both Houses, but was vetoed by President Buchanan. (*See* Congressional Globe, second session, Thirty-fifth Congress, 1858–9, Pt. II, p. 1412.) This bill and Mr. Morrill's speech on it were among the articles deposited within the corner stone of the People's College in 1858. (*See* Exercises at laying of corner stone, p. 16.)



CORNELL UNIVERSITY CAMPUS. LOOKING NORTH.

The extent of the great endowment that thus came to New York from the Federal Government can with difficulty be fully realized. Had the land represented by the scrip been located in contiguous sections it would have covered an area of over 1,500 square miles. Such a domain would have been one-third the size of Connecticut, three-fourths as large as Delaware, and would have exceeded the whole State of Rhode Island by more than 300 square miles. So imperial would it have been that only eight out of the twenty-six states of the German Empire would exceed it in size; while seven of these states could have been placed side by side upon its surface and enough territory remain uncovered to contain the fifth smallest state in that powerful Empire.

If the share of New York was thus extensive, the aggregate of the shares of all the States was indeed princely. The territory donated by the General Government for higher education, under the land-grant act, was larger in extent than any one of the eight smallest States in the Union, and was but a trifle smaller than the combined areas of the four smallest; it exceeded in size the combined areas of Rhode Island, Connecticut, and Massachusetts, or the combined areas of Delaware and Maryland; it would have made two States of the size of New Jersey, three of the size of Connecticut, seven of the size of Delaware, and twelve of the size of Rhode Island. Compared with European countries, this domain dedicated to education was one-fourth as large as England and Wales and one-eighth as large as the United Kingdom of Great Britain and Ireland; it was larger than any one of twenty-four out of the twenty-six states of the German Empire, exceeded the combined areas of nineteen of those states, and of the two largest states of the Empire—Bavaria and Prussia—was one-half as large as the one and one-ninth as large as the other; if placed upon a map of Europe it would have successively blotted out Belgium, Denmark, and the Netherlands, and would have left but a fragment of Switzerland and the lesser moiety of Servia, Bulgaria, and Greece.

Of this great land grant New York, owing to her large representation in Congress, had over one-tenth, an amount 200,000 acres in excess of that to which Pennsylvania, the next largest State, became entitled, 350,000 acres in excess of Ohio's share, and more than double that of Illinois, Massachusetts, Indiana, Missouri, or Kentucky, the only other States whose grant exceeded 300,000 acres. Thus, New York, the Empire State, became the beneficiary and the trustee of the most magnificent educational endowment ever bestowed by the United States, or perhaps by any nation.

The People's College.

1. ACCEPTANCE OF THE SCRIP.

On the 5th of May, 1863, the legislature of the State of New York formally accepted the grant, and authorized the comptroller of the

State to sell the scrip, as he and certain other State officers might deem advisable, and to invest the proceeds in bonds at not less than 5 per cent.[1] The scrip at this time was selling in the market for about 85 cents per acre, and it was estimated that the entire endowment fund would reach $800,000 and yield an annual income of about $40,000.[2] It was the evident purpose of the legislature to turn this scrip into an interest-bearing fund as fast as was consistent with good management. There could be no object in doing otherwise, for, as the amount of land subject to entry at $1.25 per acre was practically unlimited, there could be no prospect that the scrip would command a premium, and as the State was prohibited from locating the lands there could be no hope of acquiring a landed estate which might appreciate in value. Therefore the sooner the endowment could be made to yield a permanent income the greater would be the benefits secured to the State.

2. BESTOWAL UPON THE PEOPLE'S COLLEGE.

Having determined the means by which the income from the endowment was to be realized, the legislature next decided upon the direction which it should take.

There was naturally much division of opinion upon this latter point. The terms of the land grant left it within the discretion of the legislature to bestow the endowment upon a single college or to divide it between two or more. The possibility of securing some portion of the grant aroused the numerous small and needy colleges throughout the State to earnest and persistent efforts. But it was soon seen that the choice lay between the People's College, located at Havana, and the State Agricultural college, which had recently been established at Ovid.

The latter institution was chartered in 1853, and opened its doors in 1860 under the presidency of Brig. Gen. M. R. Patrick. The outbreak of the civil war called General Patrick into the service of the State and closed the college at the end of its first year. It was still closed, with small prospect of reopening, when the Federal land grant seemed to its trustees and friends to hold out a promise of ample endowment and future prosperity.[3]

The People's College was the outcome of a movement begun as early as 1850, in which Harrison Howard, then a resident of Lockport, was one of the principal leaders.[4] Mr. Howard was a member

[1] Laws of New York, 1863, ch. 460.

[2] Report of the comptroller for 1864, p. 28.

[3] New York senate docs., 1864, No. 55; 1865, No. 39.

[4] Cornell University has now in its possession a book of records, documents, and newspaper clippings kept by Mr. Howard during the progress of this movement. The writer is largely indebted to these records for what follows. The outlines of the movement are sketched in an address by William Stuart, delivered before the People's College Association in 1857 and afterwards published. (Cornell University Pamphlets, vol. 2.)

of what was known as the Mechanics' Mutual Protection Society, and had delivered various addresses before the society on the establishment of a school for the education of mechanics. He had interested the Hon. Washington Hunt, afterwards governor of the State, Horace Greeley, and the Hon. T. C. Peters, editor of the Woolgrower, in his plan for such a school. Mr. Greeley wrote an extended editorial in the New York Tribune in June, 1850, on "A Mechanics' University;" and Mr. Peters proposed that the mechanics and farmers should join in a common effort to secure adequate educational facilities of a practical character. An association was formed in 1851 to further the enterprise, and a prospectus, drafted by Mr. Greeley and Mr. Peters, was soon after widely distributed. This prospectus enunciates certain principles on which the proposed college—now termed "The People's College"—is to be established. These are: To teach practical sciences essential to agriculture and the useful arts; to furnish labor to students; to require both students and teachers to labor from ten to twenty hours each week; to furnish equal facilities to men and women; to give students free choice of branches of learning, but to require proficiency in agriculture or some branch of manufacturing or mechanical industry. Mr. Greeley and Mr. Peters were appointed by the association a committee to draft a charter and secure its passage by the legislature. A charter was granted in 1853 by which the corporation was to consist of stockholders who should take shares at $1 each. The provisions as to the educational plan of the college were practically the same as those set forth in the prospectus.[1]

The Hon. Charles Cook, of Havana, having become a patron of the proposed college, it was voted in 1857 to locate the institution at Havana in accordance with his wishes. Work was begun on a building, the corner stone being laid with much ceremony on September 2, 1858, but nothing was completed and the institution was not yet open when the struggle for the land grant began.[2]

In the same year the Rev. Amos Brown was elected president of the college. Dr. Brown was an educator of marked ability, who had taken a deep interest in promoting the educational interests of the State and nation. After his election he spent much time in Washington urging the passage of the Morrill land-grant bill, and there is abundant testimony as to the efficiency of his services in that behalf. When finally the bill became a law it was but natural that he should seek to secure the grant to New York for his own college. Mr. Cook, the patron, was at that time a senator in the State legislature, and through his influence the desired result was accomplished. The People's College secured outright the whole of the coveted prize.[3]

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[1] Laws of New York, 1857, ch. 80.

[2] Report of People's College in regents' report, 1865.

[3] Laws of New York, 1863, ch. 511, act of May 14, 1863.

The result was a surprise to many and a great disappointment to the Agricultural College.

To their astonishment and to the amazement of friends of education throughout the land, the whole of this vast fund was bestowed upon a college which had never for a day opened its doors for pupils, and which does not possess the sympathy of the leading farmers throughout the State.[1]

The terms of the grant were certainly sufficiently liberal. The trustees were to satisfy the regents of the State within three years from the passage of the bill that the college was prepared with ten competent professors to give instruction in branches related to agriculture, mechanic arts, and military tactics; that it possessed suitable accommodations for at least 250 students; that it owned a farm of at least 200 acres for the practical teaching of agriculture and suitable shops for the teaching of mechanic arts; and that it possessed a suitable library and philosophical and chemical apparatus. Upon satisfactory evidence that it had fulfilled these conditions it was to come into the full enjoyment of the income from the land grant.

3. LOSS OF THE SCRIP BY THE PEOPLE'S COLLEGE.

The history of the efforts and the failure of the People's College to retain the prize it had grasped can not be followed in detail. After a lapse of two of the three years prescribed it became evident that nothing would be done by that institution. In accordance with a resolution of the senate, the board of regents undertook an investigation of the conditions and prospects of the college with a view to determining whether, in their opinion, it would be able to fulfill the conditions of the act under which it received the grant. Their report disclosed that the college owed chiefly whatever material possessions it could boast to its patron, Mr. Cook. These, however, were far from munificent. A single building had been erected at a cost of $60,000, and upon this the patron held a lien for $31,700. In addition it had a subscription from Mr. Cook of $25,000 and had received from other sources about $14,000. Its domain consisted of 100 acres of land. All told, its entire property did not exceed $70,000 in value.[2] Its prospects were not flattering. Mr. Cook, who had been relied upon to meet the requirements of the grant, began to cool in his enthusiasm for the college. Mr. Howard says:

After Mr. Cook was sick and had a paralytic shock, he was never quite himself again. Nothing that could be said to him would induce him to go on with the work, advance the means to comply with the conditions of the law, and save the land.[3]

The consequence was that the People's College practically gave up the struggle to retain the grant, or, indeed, to be a college. Under

[1] Report of trustees of Agricultural College, sen. doc. 55, 1864.
[2] Senate Docs., 1865, No. 45.
[3] Howard MSS.

the name of Cook Academy the institution has continued its work as a preparatory school down to the present day, but the "People's College" never having had vitality enough to seize firmly or to retain the great land grant, permitted the prize to drop from its nerveless grasp, and so disappeared from the history of higher education to which it contributed nothing but a name.

II.

THE FOUNDING OF CORNELL UNIVERSITY.

A. The Founders.

The meeting of the legislature of 1864 brought together for the first time two men whose names are indissolubly connected with Cornell University—from one of whom it took its name and its material prosperity and from the other its educational spirit and purpose—Ezra Cornell and Andrew Dickson White. Never were two associates in a great work more unlike in temperament, training, and tastes. Mr. Cornell was then 57 years of age, and from his earliest boyhood had been inured to hard and often rough work, from which by his persistency and foresight he had risen to a position of wealth and influence. His education had been won during the winter terms of district schools. His training in the hard school of experience, coupled with his Quaker origin, had given him a reserved and austere air, which his tall, spare figure and firm-set mouth tended to emphasize. He seemed the embodiment of New England shrewdness, austerity, and success.[1] Mr. White, on the other hand, was but 31 years old, the youngest, as perhaps Mr. Cornell was the oldest, member of the senate. He was a graduate of Yale, a student of several of the foremost universities of Europe, a professor of history in the University of Michigan, withal a man of the highest culture and broadest sympathies. Graceful, polished, an eloquent and effective speaker, a ready debater, of an enthusiastic temperament, he seemed in all things the very opposite of the grave and quiet man of business with whom he was associated. Yet in the brains and hearts of these two men lay the germ of Cornell University.

Mr. White has himself told how these two natures, apparently so different, were brought into contact:

> Upon the announcement of committees, our paths seemed separated entirely, for he was made chairman of the committee on agriculture, while to me fell the chairmanship of the committee on education.
>
> And yet it was this last difference which drew us together; for among the first things referred to my committee was a bill to incorporate a public library which he proposed to found in Ithaca.
>
> On reading this bill I was struck, not merely by its provision for a gift of $100,000 to his townsmen, but even more by a certain breadth and largeness in his

[1] For biographical authorities for Mr. Cornell's life and character, see bibliography in appendix to this sketch.

way of making it. The most striking sign of this was his mode of forming a board of trustees; for, instead of the usual effort to tie up the organization forever in some sect, party, or clique, he had named the best men of his town—his political opponents as well as his friends—and had added to them the pastors of all the principal churches, Catholic and Protestant.

The breadth of mind revealed by this provision, even more than the munificence of his purpose, drew me to him. We met several times, discussed his bill, and finally I reported it substantially as introduced, and supported it until it became a law.[1]

The acquaintance thus begun ripened into a close and confidential friendship extending over a period of ten years, or until Mr. Cornell's death. During most of that time these two men—the unlettered man of affairs and the cultured scholar—wrought side by side in the founding and upbuilding of New York's great university.

B. A Year of Preparation.

1. Legislature of 1864.

Even as early as 1864 it was seen that the People's College would probably never be able to claim the benefits of the land grant. Renewed efforts began, therefore, to be made to secure the whole or a part of the endowment for other institutions. A bill to repeal the grant to the People's College was introduced into the senate, but failed to pass. A bill to amend the act granting the lands to the People's College so as to divert a portion to the Agricultural College also failed. This latter measure was introduced by Mr. Cornell, and was referred to the committee on literature and the committee on agriculture jointly. The bill appears never to have got beyond the committee. It was then developed that Mr. White, who was chairman of the committee on literature, was earnestly opposed to any division of the fund, and he probably succeeded in keeping the bill out of the senate. He united with Mr. Cornell, however, in reporting favorably the bill to repeal the grant to the People's College, but the repealing clause was struck out in the committee of the whole. A similar bill also failed in the assembly. The legislature adjourned without taking any further action on the grant, and the People's College was given another respite.[2]

2. Mr. Cornell's first proposal.

During the succeeding summer Mr. Cornell made the first of the proposals which finally took form in the founding of an entirely new institution. Hoping to overcome the opposition of Mr. White and to secure his support at the ensuing session of the legislature, Mr. Cornell invited his young colleague to a meeting of the trustees of the

[1] Andrew D. White. "My Reminiscences of Ezra Cornell: An address delivered before the Cornell University on Founders' Day, January 11, 1890," pp. 3 and 4.

[2] Senate journal, 1864, pp. 30, 39, 41, 42, 56, 57, 261, 361, 643, 878; assembly journal, 1864, pp. 648, 681, 1145.

State Agricultural College held at Rochester. At this meeting Mr. Cornell proposed to draw a new bill bestowing upon the State Agricultural College an income of $30,000 from the land-grant fund whenever the college should have secured an independent endowment of $300,000, which sum he pledged himself to give. This, he calculated, would be equivalent to keeping the whole fund together and would remove all objections to the proposed division.

To the general surprise, however, Mr. White still opposed any division of the fund. It is probable that he saw in Mr. Cornell's generous offer the opportunity of augmenting the fund instead of decreasing it, and color is lent to this supposition by the fact that he then proposed that Mr. Cornell should ask for the entire fund, pledging at the same time the $300,000. If this were done, he signified his willingness to support the bill vigorously in his committee and in the senate. The meeting seems to have adjourned without any agreement being reached, but the germ idea of Cornell University was beginning to take definite form in the brain of the founder.[1]

C. The Struggle in the Legislature of 1865.

1. Mr. Cornell's final proposal.

The legislature of 1865 settled finally and for all time the vexed question of the land grant.

Mr. Cornell had prepared a masterful solution of the difficulty. Convinced of the inexpediency of dividing the fund, he simply proposed that if the State would turn the endowment over to an entirely new institution he would add to the endowment the sum of $500,000 out of his own means.

This conclusion was reached after consultation with trusted friends, and especially with Mr. White, who, in his reminiscences of Mr. Cornell, has related the story of the founder's munificent proposal. Nor had Mr. Cornell yielded his interest in the Agricultural College without careful consideration, nor without consultation with the friends of that institution. As early as January 12, 1865, the board of trustees of the Agricultual College had invited the friends of the People's College to meet in a conference to take into consideration Mr. Cornell's offer. On January 24 a number of gentlemen interested in those two institutions met with Mr. Cornell and Mr. White at Albany, and after a discussion of the questions involved unanimously resolved that the courses of the Agricultural and People's colleges should be united in a single institution, "located at such place in the central part of this State as shall, at an early day, present the greatest pecuniary inducements," and that this institution ought to be the recipient of the land-grant fund.

[1] White: Rem. of Ezra Cornell, p. 5; A. B. Cornell, Biog. of Ezra Cornell, p. 194, where we read: "The defeat of the proposition to divide and disperse the land-grant income was due more to his [Senator White's] arguments and influence than to any other cause."

Mr. Greeley, long a trustee of the People's College, wrote:

I had hoped that the People's College at Havana would grow into what is required, but that hope seems unlikely to be realized, while Senator Cornell's noble proffer appears to give promise of a glorious realization. I have, therefore, decided to give whatever help I may to this undertaking, and I hope the land grant for our State will be transferred without division and diminution to the Ithaca College.[1]

Other trustees of the People's College—notably Erastus Brooks, Daniel S. Dickinson, and Edwin B. Morgan—also transferred their allegiance to Mr. Cornell's proposed university.

Thus fortified by friends of both the institutions which had the strongest claims on the fund, Mr. Cornell decided to push his measure for the establishment of a new university.

2. PASSAGE OF THE CHARTER.

On February 3 Mr. White gave notice that he would introduce in the senate a bill to establish the Cornell University and to appropriate to it the income of the sale of lands granted to the State by the General Government.[2] On the next day he introduced a resolution requesting the board of regents to inquire into the condition of the People's College and state whether it was likely to be able to avail itself of the land-grant fund.[3] On the 7th he introduced the bill incorporating Cornell University and appropriating to it the endowment from the land grant.[4] The bill was referred to the committees on literature and agriculture jointly. On the 15th the regents made their report on the condition of the People's College, showing that it had fallen far short of complying with the conditions of the act under which it might claim the benefits of the land grant.[5] On the 25th the bill was reported favorably by the joint committee and was laid on the table, where it remained until the 28th, when it was taken up and recommitted to the joint committee.[6] It was reported back on March 9 and considered in committee of the whole on that and the succeeding day, and was amended so as to permit the People's College to deposit with the State treasurer within three months, in lieu of the conditions imposed upon it, such a sum as, in the opinion of the regents, would enable it to fulfill those conditions at some future time, and in case such deposit was made the grant to Cornell University was to be void.

Thus amended it was again recommitted to the joint committee for final completion.[7] It seems to have been put, however, into the hands

[1] Letter to Mr. White, Feb. 20, 1865. Pamphlet headed The Cornell University, N. D. [1865].

[2] Senate Journal, 1865, p. 144.

[3] Ibid., p. 149.

[4] Ibid, p. 155.

[5] Senate docs. 1865, No. 45.

[6] Senate Journal, 1865, pp. 244, 275.

[7] Ibid., p. 374.

of Mr. Folger, chairman of the judiciary committee, who reported it to the senate on the 15th as from the joint committees of the judiciary and literature and recommended its passage.[1] It was engrossed, and on the 16th passed the senate by a vote of 25 to 2.[2]

Mr. White's services in pushing the bill through the senate were of the first importance. He had addressed letters to representative men throughout the State, and especially to those interested in the People's College. He had acquainted himself with the actual condition of that institution, and had armed himself at all points for a vigorous battle. His services culminated in a speech[3] delivered in the senate, in which he showed the injustice to the people of the State and to the cause of education in permitting such an offer as that of Mr. Cornell to pass unaccepted. He declared his unalterable opposition to any division of the fund; showed the utter prostration of the People's College, and the evident purpose of Mr. Cook not to carry out his plans for an enlargement of its resources; proved that the Agricultural College was bankrupt and had been given up as a failure by its best friends; and put in glowing terms the advantages to the people of the State of such a seat of learning as Mr. Cornell proposed to establish. In his committee and on the floor of the senate Mr. White was the leading champion of Mr. Cornell's noble desire to do something for the practical education of the people.

In the assembly the bill was referred to the committee on colleges, academies, and common schools and the committee on agriculture jointly.[4] Here it slumbered for nearly a month, when, on April 12, its friends passed a resolution instructing the committee to report it for consideration.[5] This action defeated an evident purpose to "pocket" the bill. The committee reported it on the 13th,[6] and it was considered in committee of the whole on that day,[7] where it was amended, and was passed as amended on the 21st by a vote of 79 to 25.[8]

The amendment made in the assembly was of a very peculiar nature. A strong lobby had gone up to Albany in behalf of various small colleges which were anxious to secure a portion of the land grant. All of these had some backing in the legislature.

The friends of the Genesee College, of Lima, succeeded in forcing into the bill an amendment providing that in addition to the $500,000 Mr. Cornell was pledged to give to the new university he should also

[1] Senate Journal, 1865, p. 417.
[2] Ibid., p. 438.
[3] This speech was printed and may be found among the pamphlets relating to Cornell University in the university library.
[4] Assembly Journal, 1865, p. 696.
[5] Ibid., p. 1252.
[6] Ibid., p. 1280.
[7] Ibid., p. 1288.
[8] Ibid., p. 1336.

be required to give $25,000 to the Genesee College before his university would become entitled to the land grant. Mr. Cornell consented rather than abandon his plan.[1]

This was not the only trial, however, to which the determined purpose of the founder was put. At a hearing before the assembly committee, a lawyer engaged in behalf of the People's College held Mr. Cornell up to public gaze as a vain and selfish speculator, who, while seeking to build a monument to himself, was also on the point of "grabbing" the great land grant for mercenary ends; and with such fustian, epithets, and innuendoes sought to bring his whole philanthropic scheme into suspicion and contempt. Through it all Mr. Cornell sat grave and quiet, with Mrs. Cornell on one hand and Mr. White on the other, unmoved and unangered. "I admired," says Mr. White, "Mr. Cornell on many occasions, but never more than during that hour when he sat, without the slightest anger, mildly taking the abuse of that prostituted pettifogger, the indifference of the committee, and the laughter of the audience. It was a scene for a painter, and I trust that some day it will be fitly perpetuated for the university."[2]

These attacks upon his motives and upon his purse seem never to have shaken the purposes of Mr. Cornell. He quietly ignored the slanders of the attorney for the opposition, and he accepted uncomplainingly the amendments to the bill carried through by the People's College and by the Genesee College.

This last amendment came near wrecking the whole matter when the bill came back to the senate, for Mr. Cornell's friends were so justly indignant at the extortion that they wished to reject the amendment; but as the session was nearly over, and to trust the bill again to the assembly would be extremely hazardous, the senate concurred and the bill became a law by the approval of the governor on the 27th of April, 1865. The struggle for the possession of the great land grant was over, and the work of building a university was now to begin.

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[1] A subsequent legislature passed an act refunding this sum of $25,000, not to Mr. Cornell, but to Cornell University. Thus, in effect, the State gave Genesee College $25,000, and Mr. Cornell's endowment was forced up to $525,000. (See Laws of New York, 1867, chapter 174.)

[2] My Reminiscences of Ezra Cornell, p. 12. "In one of the worst tirades against him he turned to me and said quietly, and without the slightest anger or excitement, 'If I could think of any other way in which half a million dollars would do as much good to the State, I would give the legislature no more trouble.' Shortly afterwards, when the invective was again especially bitter, he turned to me and said, 'I am not sure but it would be a good thing for me to give the half million to old Harvard College, in Massachusetts, to educate the descendants of the men who hanged my forefathers.'" [Referring to his Quaker ancestry.]—Ibid.

D. The University Charter.

1. How the charter was framed.

The charter was the joint work of three men—Ezra Cornell, Andrew D. White, and Charles J. Folger, the last being at that time chairman of the judiciary committee of the senate. Mr. Cornell drafted the portion relating to the endowment and the land grant; Mr. White, the portion relating to educational features, scholarships, and non-sectarianism; Mr. Folger put the whole, when drafted, into proper legal form.

Mr. White, in his Reminiscences of Mr. Cornell,[1] bears witness to the largeness and saneness of Mr. Cornell's views, as shown in the preparation of the charter. His own broad and sagacious views as to the principles and policy of the university were rendered more valuable by the readiness with which he accepted and acted upon suggestions from his two colleagues and advisers. On matters of educational features he deferred to Mr. White; on matters of legal features, to Mr. Folger. But he summed up his own large purpose in the phrase which he uttered at that time as the fundamental idea which should control every provision of the charter: "I would found an institution where any person can find instruction in any study." This idea he fixed unalterably at the center of his plan, and from it has radiated all that is best and most permanent in the university which bears his name.

2. The corporate name.

The name Cornell University was adopted almost in opposition to the wishes of Mr. Cornell. He had expected to call the new institution the "Ithaca State College," or something similar. It was only after Mr. White had pointed out, by reference to Harvard, Yale, Dartmouth, Amherst, Bowdoin, Brown, Williams, and the like, that the usage was in favor of naming a college after its chief benefactor that he finally yielded.[2]

The enemies of the university had charged that Mr. Cornell wished to "erect a monument to himself." They probably caught up the phrase from a letter of Edwin B. Morgan, which, after speaking of the munificence of Mr. Cornell's gift and the humiliation of his having to stand all winter beseeching the people's representatives to grant him the privilege of paying a half million of dollars for the people's good, concludes as follows:

> Few men have proposed to build themselves such a monument even in their "last will and testament;" a far less number have done so while living. Peter Coopers and Ezra Cornells are rare.[3]

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[1] Pp. 8–9.

[2] My Reminiscences of Ezra Cornell, etc., p. 8.

[3] The bill to incorporate the Cornell University was introduced February 7, 1865. Mr. Morgan's letter bears date February 27, 1865. Yet Horace Greeley, in a letter to Mr. White, written February 20, 1865, speaks of the proposed school as the "Ithaca College." Pamphlet headed "The Cornell University." N. D. [1865].

This phrase, intended in a sense altogether complimentary, was perverted by the enemies of the university into a term of reproach.

Nobody will now question the entire propriety of the name which the university bears. The university, undoubtedly, owed its existence to Mr. Cornell's noble generosity. Its subsequent material prosperity was no less the result of his sagacity and devotion. He did, indeed, build a monument to himself, but he built it, not for his own glory, but for the perpetual service of mankind. Into that service it bears his honored name, the name of a true and genuine and noble man, who, coming from the people, remained to his last day in sympathetic touch with all their needs and struggles and aspirations.

3. THE LOCATION OF THE UNIVERSITY.

The location of the university at Ithaca was a concession to Mr. Cornell. Many of the friends of the university felt that it was a serious mistake to place it so far from the great lines of travel, and Mr. White offered to add a large sum to its endowment if Mr. Cornell would consent to have it built at Syracuse.[1] But as Mr. Cornell was anxious to have it situated at Ithaca, and promised to do as well by it as Mr. White would do, his wishes naturally prevailed. He cared nothing for the name of the university, but he loved the noble hills and quiet valley, the bold ravines and broad lake, where for more than a quarter of a century he had wrought with honest toil and with merited success, and he wished this best and crowning work of his life to rise upon those hills above lake and town and flashing cataract the pride and glory of them all. And so Ithaca became the seat of Cornell University.

4. GENERAL PROVISIONS OF THE CHARTER.

The charter[2] creates a body corporate, to be known as Cornell University, and fixes the location of such university at Ithaca.

The leading object of the corporation is to teach such branches of learning as are related to agriculture and the mechanic arts, including military tactics, but such other branches of science and knowledge may be taught as the trustees may deem useful and proper.

The farm and grounds must consist of not less than 200 acres. Two years, from the passage of the act, are granted the trustees within which to provide suitable buildings and equipment.

A system of free scholarships is provided for, whereby the university

[1] MS. in possession of Mr. White. Mr. White at that time lived in Syracuse and represented the Onondaga (then the Twenty-second) district in the senate. Mr. Cornell lived at Ithaca and represented the Twenty-fourth senatorial district, of which Tompkins County was a part.

[2] Laws of New York, 1865, chap. 585.

is required to receive annually one student from each assembly district in the State free from any tuition fee or incidental charge.[1]

The university is to be absolutely nonsectarian. Two provisions fix this beyond all question. The first relates to the trustees, and provides that "at no time shall a majority of the board be of one religious sect, or of no religious sect." The second relates to faculty and students and declares that "persons of every religious denomination, or of no religious denomination, shall be equally eligible to all offices and appointments."

The limit of the capacity of the university to hold real and personal property is fixed at $3,000,000. This provision, inserted in unconscious deference to the ancient statutes of mortmain, proved eventually a costly mistake, as it stood in the way of the university's receiving upward of a million and a half of dollars, bequeathed it by Mrs. Jennie McGraw Fiske. The section has since been amended, so that there is now no limit, save that of its own needs, to the capacity of the university to hold property, real or personal.[2]

5. THE TRUSTEES.

In the original charter the number of trustees is fixed at twenty-four, seven of whom are trustees ex officio. The trustees named by the charter were Ezra Cornell, William Kelly, Horace Greeley, Josiah B. Williams, William Andrus, John McGraw, George W. Schuyler, Hiram Sibley, J. Meredith Read, and John M. Parker. These ten trustees were empowered to select seven others to act with them. The ex officio trustees are the governor, the lieutenant-governor, the speaker of the assembly, the superintendent of public instruction, the president of the State Agricultural Society, the librarian of the Cornell (Ithaca Public) Library, and the eldest male lineal descendant of Ezra Cornell. The first board was completed by the election of the following additional members: Andrew D. White, Charles J. Folger, Abram B. Weaver, George H. Andrews, Edwin B. Morgan, Edwin D. Morgan, and Erastus Brooks.

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[1] The provisions for the selection of free students have been three times amended since the passage of the charter. (Laws of New York, 1872, chap. 654; *Ib.* 1886, chap. 614; *Ib.* 1887, chap. 219.) By the terms of the last amendment the scholarships are awarded upon a competitive examination, in which competitors must be at least 16 years of age and of six months' standing in the common schools or academies of the State during the year immediately preceding the examinations. Examinations are held in each county and the results certified to the department of public instruction, which also prepares the examination questions upon subjects designated by the president of the university. When a scholarship is unclaimed in any county it may be filled by the State superintendent from among those first entitled to a vacancy in some other county. At that time the number of assembly districts was 128, but by the revised constitution, which went into effect January 1, 1895, the number is increased to 150.

[2] Laws of New York, 1882, chap. 147.

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...32), pp. 35–37.
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...rnell, p. 19.
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...l by Mrs. White, and is called in her
...Russell Lowell wrote this fine inscription:

...vocable hours,
...strong as fate to make
...and or granite; awful powers,
...en choose, they either give or take.
—Heartsease and Rue, p. 216.

By a subsequent amendment to the charter the number of elective trustees was reduced to fifteen. This was effected by making Ezra Cornell a life member, and the president of the university, to which position Andrew D. White had then been elected, a member ex officio.[1] At the same time the term of office of the elective trustees was fixed at five years, three members to be elected each year. The amendment also provides that when the number of alumni shall reach 100, 45 of them may, by a majority vote, elect annually one of the three incoming trustees.

By a subsequent amendment in 1895,[2] the number of elective trustees is raised to thirty, twenty of whom are to be elected by the board and ten by the alumni, the board to elect four each year and the alumni two. Elective trustees serve for a period of five years each. This, with the trustees ex officio,[3] makes the number of the present board after June, 1895, thirty-nine.

The novelty and importance of the provision as to alumni representation have been demonstrated in the interest attaching to the elections. But the difficulty of gathering a large body of electors from widely separated points gave eventually a somewhat local character to the election and wrought an injustice to those living at a distance. This was obviated by another amendment permitting alumni to send their ballots, under their signatures, to the treasurer of the university and to have them counted as if personally cast.[4] Concert of action in such elections is secured by a provision whereby any ten alumni may file a nomination for alumni trustee with the treasurer, whose duty it is to mail a complete list of candidates to each alumnus. Much interest has always been taken in these elections by the alumni, and in some years, when questions of university policy have been involved, campaigns have been conducted with the greatest vigor by well-organized committees. In the early years the alumni chose a representative from outside their own body, but of late their choice has invariably fallen upon graduates of the university, and it is doubtful whether any others will hereafter be chosen by them. The plan, the credit for which is due to Mr. White, has worked extremely well, both as regards the interest it serves to keep alive among graduates and the character of the men who are elected to the board. The board has also begun the practice of electing alumni as trustees, and with the increase in the alumni body and their growing importance in university affairs, it is altogether probable that Cornell, like the older colleges, will eventually pass largely under the management of her own sons.[5]

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[1] Laws of New York, 1867, chap. 763.

[2] Ibid., 1895, chap. 87.

[3] The State commissioner of agriculture was added to the ex officio list.

[4] Laws of New York, 1883, chap. 423, as amended by L. 1895, chap. 87.

[5] Five of the twenty trustees elected by the board are now Cornell alumni.

E. The Origin of the Idea of Cornell.

To Ezra Cornell belongs the honor of being the founder of Cornell University. Even before the conception of such an institution had taken form in his mind he had fully determined to devote a half million of dollars to the benefit of the people of New York State.[1] When he realized the immense advantages to be gained by uniting this endowment with the land-grant fund, and came to see the futility of division and the wisdom of concentration of resources in higher education, his purpose was quickly formed. From that purpose, thereafter unchanged, came into being the university that bears his name.

To Andrew D. White, his faithful friend and coworker, belongs the equal honor of having first conceived the idea of such a university. Of this, happily, there is ample evidence.

While still a student in a small denominational college in central New York, Mr. White had begun to think of the needs of New York in respect of higher education. With his larger experience at Yale College and in the great universities of Europe, the idea had strengthened that in New York there should be a university, broad enough to meet all the needs of the Empire State and of this nineteenth century. On his return from Europe he took positive steps toward the accomplishment of his cherished plan. Several wealthy men, notably the well-known philanthropist, Gerrit Smith, were approached by him on the subject and a definite offer was made by Mr. White of a generous share of his own fortune for such a purpose, but nothing tangible resulted from these efforts.[2]

The most remarkable testimony as to the early ideas of Mr. White on this subject is borne by George William Curtis, long a regent and afterwards chancellor of the University of the State of New York. In his address at the inaugural ceremonies of Cornell University. Mr. Curtis said:

> It is now just about ten years since I was in the city of Ann Arbor, Mich., the seat of the University of Michigan. . . . I was in that city and I sat at night talking with my friend, a New York scholar, professor of history in that institution, and one of the men who have given that institution its great place in this country. There, in the warmth and confidence of his friendship, he unfolded to me his idea of the great work that should be done in the great State of New York. "Surely," he said, "in the greatest State there should be the greatest of universities; in central New York there should arise a university, which, by the amplitude of its endowment and by the whole scope of its intended sphere, by the character of the studies in the whole scope of its curriculum, should satisfy the wants of the hour. More than that," he said, "it should begin at the beginning. It should take hold of the chief interest of this country, which is agriculture; then it should rise, step by step, grade by grade, until it fulfilled the highest ideal of what a university could be." It was also his intention that there should be no

[1] White: My Reminiscences of Ezra Cornell, p. 7.

[2] Ibid, pp. 5, 6.

man, wherever he might be, on the other side of the ocean or on this side, who might be a fitting teacher of men, who should not be drawn within the sphere of that university. Until the hour was late this young scholar dreamed aloud to me these dreams; and at the close, at our parting, our consolation was that we lived in a country that was open to every generous idea, and that his dream one day might be realized was still a possibility.

Ten years ago—and why are we here? Why am I speaking to you? What is this building that we see? What are these bells we hear? What are these chimes, whose musical echo lingers and will always linger in your hearts? Why, on this autumn day, when every crop is in its perfection, when all the sweet blossoms of your orchards are now glowing in gorgeous piles of fruit, all the grain dropped by you in the furrows is now piled and to be piled in the granaries of the world; why, in this spot, on this autumn day, the vision of the New York scholar has come true. Here in noble stone, here scattered through this village of yours, here upon these everlasting hills, founded now, and with these hills to endure, more wonderful than the palace of Aladdin, you behold, you realize the dream of the scholar of the Michigan University, your honored president, Andrew D. White.[1]

Thus was conceived, thus born, Cornell University. What the brain of the scholar planned, the heart of the philanthropist builded. New York has her great university—broad enough for the needs of all her people, high enough for the aspirations of her most ambitious sons—and for it she owes her meed of praise most of all to two men—Ezra Cornell and Andrew D. White.

III.

THE BUILDING OF CORNELL UNIVERSITY.

A. Preliminary Matters—Site and Buildings.

After the passage of the charter the trustees were obliged to remain inactive for three months, during which time the People's College, by depositing the sum fixed by the regents, might defeat the land grant to Cornell. The sum fixed by the regents was $185,000. On the 28th of August, 1865, the secretary of the regents certified that no such deposit had been made, and, as the time limited had then more than expired, there could be no further claim on the part of the People's College. Cornell University was entitled henceforth to undisputed possession of the great endowment.

The first meeting of the trustees had been held at Albany on the day following the passage of the charter, at which time the board had been filled by the election of additional members, and the grant of the land scrip had been formally accepted.[2]

The second meeting was held at Ithaca on September 5. At this time Mr. Cornell agreed to execute his bond for the sum of $500,000, bearing interest at 7 per cent, and secure the same by capital stock of the Western Union Telegraph Company to the amount of $700,000.

[1] Proceedings at the inauguration of Cornell University. (Ithaca, 1869.) pp. 33, 34.
[2] Laws and Documents Relating to Cornell University (Ithaca, 1892), pp. 33–35.

This arrangement was accepted by the trustees and was afterwards carried out.[1] At the same time he paid $25,000 to the Genesee College; and both transactions were certified by the comptroller of the State as correct and satisfactory.

The matter of a site for the university Mr. Cornell solved in a very characteristic way by giving, in addition to his pledge, a tract of over 200 acres of land upon an eminence overlooking Cayuga Lake and the village (now city) of Ithaca from the east. It had passed into a saying among his fellow-townsmen that "he never did less than he promised, but generally more." This tract was increased by subsequent purchases until the university domain now comprises about 270 acres.

Work now began in earnest. The structure now known as Morrill Hall—but then and up to 1883, as the "South University building"—was begun, and necessary improvements of what was to be the campus went on as rapidly as possible. But it soon became evident that, owing to the delay which had taken place, the university could not be ready for the reception of students within the two years prescribed by the charter. An amendment was therefore secured from the legislature of 1867 extending the time for the fulfillment of the conditions of the grant to the 1st of October, 1868.[2] Even this extension was not sufficient for the completion of the necessary work. In addition to the South University building, the Cascadilla building originally intended for a water cure, was refitted for university purposes. When the inaugural day came, neither of these buildings was finished, nor was the work upon the campus completed. There were no doors upon the students' rooms, no heating apparatus, no bridges across the ravines on the campus, while the entire equipment for laboratories and shops was stored without order in whatever spot would give it shelter and security.[3]

Aside from the two buildings named, there was erected just south of the South University building a temporary campanile, in which was hung a chime of nine bells, the gift of Miss Jennie McGraw.[4]

This was the material appearance of Cornell University when it began its work in October, 1868. Between Cascadilla place and the

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[1] Laws and Documents Relating to Cornell University (Ithaca, 1892), pp. 35–37. Mr. Cornell had made his fortune largely in telegraph enterprises, in which he was a pioneer, and was one of the originators of the Western Union Telegraph Company.

[2] Laws of New York. 1867, chap. 763.

[3] Andrew D. White: My Reminiscences of Ezra Cornell, p. 19.

[4] Afterwards hung in the tower of McGraw Hall and now finally placed in the tower of the library. A tenth bell was added by Mrs. White, and is called in her honor the Magna Maria. For it James Russell Lowell wrote this fine inscription:

> I call as fly the irrevocable hours,
> Futile as air or strong as fate to make
> Your lives of sand or granite; awful powers,
> Even as men choose, they either give or take.
>
> —*Heartsease and Rue, p. 216.*

South University building were two deep ravines—the Cascadilla Gorge and a lesser one. About the South building was a rough and broken field which had been hastily transformed from a cornfield into a campus. All was crude and unfinished. But in that "box in a cornfield," as it was not inaptly called, there was to begin a novel experiment in education, an experiment which drew at once the attention of the whole country and which has succeeded beyond the fondest expectations of its authors.

B. The Plan of Organization.

At an early meeting of the trustees Mr. White had been appointed upon a special committee to prepare a report upon the internal organization of the university. On October 21, 1866, his report was presented to the board.[1]

The report opens with a discussion of the question whether, under the act of Congress and the charter of the university, the trustees would be justified in providing for instruction in departments foreign to agriculture and the mechanic arts. Of their power to do so there could be no question. The act of Congress of 1862 uses the lauguage "without excluding other scientific and classical studies," and declares the object of the donation to be "to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." The charter is equally broad. After specifically naming agriculture and the mechanic arts as the leading and required studies, it adds: "But such other branches of science and knowledge may be embraced in the plan of instruction and investigation pertaining to the university as the trustees may deem useful and proper." Of the propriety of thus extending the scope of the university Mr. White had no doubt. His plan of organization argued for it and provided for it.

His plan was to have two great divisions of the university, the first to include separate departments devoted to special sciences and arts and the second literature and the sciences and arts in general. Under the first division were to fall agriculture, mechanic arts, civil engineering, commerce and trade, mining, medicine, law, history and political science, and education. Not all of these courses were recommended at the outset; not all are yet established; some, like commerce and trade, may never be established. Those that were particularly recommended, and that have since reached the greatest development, are agriculture, mechanic arts, civil engineering, and history and political science. Upon the last the report is especially urgent, and the views then expressed have continued to retain their hold upon the trustees and faculty and have finally blossomed into the strong and admirably equipped "President White School of History and Political Science."

[1] Report of the Committee on Organization. Albany, 1867.

The report also recommends in the general courses a wide liberty in the choice of studies—Greek and Latin for those who have the taste and time for them, but literature, history, modern languages, and science for those whose tastes lie in other directions. Mental discipline is to be sought, not merely in those studies that promote keenness and precision of mind, but also in those that promote breadth of mind. "In American life there will always be enough keenness and sharpness of mind. But the danger is that there will be neglect of those noble studies which enlarge the mental horizon and increase mental powers in reaching out toward it, studies which give material for thought and suggestions for thought upon the great field of the history of civilization."[1]

The report recommends the division of the faculty into resident professors and nonresident professors, the latter to give brief courses of lectures each year.

Upon the question of administration, Mr. White strongly recommended that the then prevailing system under which the president of a college or university decides all matters of government and policy be replaced by one in which the faculty at large should be intrusted with this power; that each department, with its separate faculty, be authorized to govern matters pertaining particularly to it; and that the combined faculty of the whole university constitute an academic senate, in which every teacher in the university should be permitted to speak, but only the professors or heads of departments to vote. This plan, with some modifications, was adopted, the general faculty having committed to its charge most questions of internal administration and discipline. Later an academic senate consisting only of full professors was for a time added, but during President White's entire administration professors of all grades sat in the faculty meetings and took part in its deliberations.[2]

The report has further recommendations upon equipment, library, discipline, etc., which need not here be considered, while the matters pertaining to manual labor, physical culture, and the dormitory system will be treated hereafter.

The whole tone and spirit of the report can not but be regarded as broad, progressive, and in some features unique. The idea of gath-

[1] Report of the Committee on Organization, Albany, 1867, p. 10.

[2] By legislation passed in 1897 the university is divided into the graduate department, the academic department (or department of arts and sciences), the college of law, the college of civil engineering, the Sibley college of mechanical engineering and mechanic arts, the college of architecture, the college of agriculture, and the New York State Veterinary College, to which have subsequently been added the medical college and the New York State College of Forestry. There are nine special faculties and one general or university faculty, which deals with questions of general university policy, or questions which concern more than one special faculty, and which has charge of the graduate department.

ering in the same class rooms the students of agriculture and of Greek, of mechanical or civil engineering and of literature, was a bold one, and the experience of some older colleges in which scientific students were, and still are, excluded from the social life of the academic students seemed to augur but ill for its success. But the foundation idea of Cornell University was thoroughly democratic, and the men who molded its history had no sympathy whatever with the worn-out traditions of academic life. They deemed it equally honorable to build philosophies or steam engines, to turn out a neat translation or to turn a straight furrow, to frame a law or build a bridge. They were determined that the students who came to Cornell should take a like view so far as daily experience would induce it. This feeling found its most advanced exponent in Mr. White and its highest expression in this report and his subsequent inaugural address.

C. The Choice of a President.

A year and a half had passed in this preliminary work and as yet no one had been selected to preside over the destinies of the nascent university. The matter had been broached from time to time; several names had been presented for consideration; but there had been no open discussion of Mr. White's name, nor had he ever had the slightest thought that it was under consideration for this position. It was therefore a genuine surprise to him when Mr. Cornell, at the meeting of the trustees succeeding that to which the report on organization had been presented, named him as the fittest person for president of the new university. In the face of Mr. White's own protests that there was need of a man of greater age, more robust health, and wider reputation, the trustees earnestly seconded Mr. Cornell and declared their young colleague to be their first and unanimous choice. Mr. White at last reluctantly consented to undertake the duties for a time, and with many misgivings, as he himself has said, became the first president of Cornell University.[1]

There were many reasons why this position should not have appeared very attractive to Mr. White. He was just entering upon what promised to be a brilliant political career. Large business interests demanded his attention. His taste for academic life was sufficiently gratified by his work at the University of Michigan, where he held the position of professor of history and where he was in the habit of lecturing every spring. He had, moreover, just been elected director of the art school and lecturer on the history of art at Yale College, a posititon which, if he decided to return to educational work, would have best suited him. In addition to all this, abundant wealth gave him an opportunity to pursue his favorite studies on either side of the Atlantic unhampered by the burdens of a young and struggling university.

[1] White: My Reminiscences, etc., p. 16. He was elected on October 24, 1866.

Two considerations doubtless led him finally to accept the trust. The first was the opportunity it offered for him to build on his own lines the great school of his early dreams. The other was the firm faith of Mr. Cornell in his fitness to carry out the far-reaching plans upon which they were jointly agreed. For these reasons he undertook the arduous duties of a first president. Yet there was even then only the purpose to get the university fairly started and then aid in the selection of a man who should carry it on in the spirit of its founders. But having once undertaken the work he did not find it so easy to lay it down, and for nineteen years he remained the president and the guiding force of Cornell University.

D. The Selection of a Faculty.

The first faculty of Cornell consisted of twenty resident and five nonresident professors. This includes all the men who had been selected before the opening of the university, and in the case of nonresident professors some who were elected during the first year. The following list will show with what degree of success the ideas set forth in the report on organization were realized:

Professors.—Andrew Dickson White,[1] history; William Channing Russel,[2] history and romance languages; William Dexter Wilson,[3] philosophy; Evan Wilhelm Evans,[2] mathematics; Albert Sproul Wheeler, ancient languages; Daniel Willard Fiske, Germanic languages; Homer B. Sprague, rhetoric and oratory; Eli Whitney Blake,[2] physics and industrial mechanics; William Charles Cleveland,[2] civil engineering; John Lewis Morris,[4] mechanical engineering; George Chapman Caldwell,[4] agricultural chemistry; James Mason Crafts, general chemistry; Burt Green Wilder,[4] comparative anatomy and zoology; James Law,[4] veterinary medicine and surgery; Charles Frederick Hartt,[2] geology; Albert N. Prentiss,[2] botany; Joseph H. Whittlesey,[2] military science and tactics.

Assistant professors.—Ziba Hazard Potter, mathematics; James Morgan Hart,[5] modern languages; Thomas Frederick Crane,[4] romance languages.

Nonresident professors.—Jean Louis Rodolphe Agassiz,[2] natural history; Goldwin Smith,[6] English constitutional history; James Russell Lowell,[2] English literature; George William Curtis,[2] recent literature; Theodore William Dwight,[2] Constitution of the United States.

The theory upon which this faculty was chosen is sufficiently set forth in the "Report on organization." It was briefly that the great

[1] Still lectures occasionally.
[2] Deceased.
[3] Now emeritus professor; during his entire service was registrar.
[4] Still in service.
[5] Resigned in 1873; elected in 1890 professor of rhetoric and English philology.
[6] Emeritus.

could not be tempted to leave permanently their positions at ges; that the middle-aged men who had attained but an ind cess were not likely to aid materially in the rough work of the ive period of the university, and that, therefore, the wisest course was to select young men after careful and confidential consultation ith eminent educators throughout the country, and to bring to the university for short courses of lectures some of the most successful and inspiring teachers in various departments. President White has told how this plan was carried out:

> As to the choice of the younger men for the resident professorships, I consulted, first of all, Agassiz, and there comes back to me very vividly the remembrance especially of a beautiful day at Nahant, when he discussed men and measures very fully with me almost from morning until ev ing. To the various scientific professorships I nominated mainly men he ommended, and every one of them turned out most successfully. I utterly re ed, in any case, to allow mere paper recommendations presented by candidates t have any influence upon my mind. Nothing weighed with me except confidentia. communications from trustworthy judges, and in every case I insisted on seei g and talking with the candidate before seriously considering his name. In th s way was secured what I still think was one of the most energetic and capable odies of instructors in this or any other country.[1]

The policy thus begun has, main, continued to prevail at Cornell, although in late year the university has been able to offer inducements which, all things considered, are nearly if not quite as great as those offered by the most favored of the older colleges. The faculty at the end of the academic year 1897–98 consisted of fifty-one professors, seven associate professors, twenty-five assistant professors, two lecturers, fifty-seven instructors, and fifty-four assistants, and a large number of nonresident lecturers. This does not include the professors in the medical college and college of forestry, whose work began in the fall of 1898. The medical faculty adds twenty-six professors, twenty-one instructors, and eighteen assistants to the list.

The same policy also continues in the selection of nonresident lecturers. Among those who have been called for courses of lectures are such men as Bayard Taylor, James Anthony Froude, Edward A. Freeman, George Washington Greene, Felix Adler, Hermann von Holst, John Fiske, Charles Dudley Warner, Daniel H. Chamberlain, Richard T. Ely, Francis M. Finch, Merrill E. Gates, Ira Remsen, Francis A. Walker, Edward Atkinson, and scores of others. The interest and enthusiasm aroused by the daily work of young professors, whose world is still before them, has been happily supplemented by the inspiration caught from lecturers whose work is largely done and whose standing and reputation are made.

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[1] Unpublished MS. in possession of Andrew D. White.

E. President White's Work in Europe.

The preliminary work at Ithaca having been thus laid out, President White spent several months in Europe in the interest of the university. His main purpose was to study the organization and details of the leading technical schools and to gather such apparatus and equipment as seemed indispensable at the outset. A secondary purpose was to purchase books for the beginnings of a library and to see what could be done by way of interesting certain eminent European scholars in the course of nonresident lectures.

As a result of his main purpose a large collection of choice apparatus was sent to the university from various points in Europe. The extent and value of it were largely due to the unfailing generosity of Mr. Cornell, who, when the limit of means seemed to be reached in advance of the limits of necessity, invariably directed the purchase of the additional material.[1] In this way it happened that the university from the first had an unusually excellent equipment in the technical and scientific departments. In succeeding years this grew into proportions which, taking all departments together, may fairly be termed unsurpassed on this continent.

The purchase of books was also liberal, considering the means then actually at the disposal of the trustees. When the university opened there were about 12,000 volumes in the library, all selected with special reference to the immediate needs of professors and students.

But the best result of Mr. White's work in Europe was not in selecting apparatus and books, but in interesting in the new educational experiment two men who have contributed largely to its success.

> For the faculty I secured Goldwin Smith to take the chair of English history, and James Law, who has since become so eminent in his department, to take the professorship of veterinary medicine and surgery in the agricultural college. Both of these selections were especially fortunate. The great services of Dr. Law to the university and to the country I need not dwell upon. It is not too much to say that he has, during his career at Cornell University, prevented the loss of hundreds of millions of dollars from the cattle plague, to say nothing of the great benefits he has conferred as a professor. As to the work of Goldwin Smith, his influence for good can hardly be overestimated. His lectures upon English history gave a great impulse to historical studies among the students and added much to the character and standing of the university in the country at large, while his quiet, scholarly influence was felt for good by the whole university body.[2]

Nothing, perhaps, better illustrates the intended scope and breadth of the university then building than the selection in England of these two eminent teachers in fields so widely different. And the acceptance by them of professorships in a university not yet organized is a tribute alike to their devotion and to the enthusiasm and courage of Cornell's youthful president. Goldwin Smith was then professor of history at

[1] White: My Reminiscences of Ezra Cornell, etc., p. 18.

[2] President White in an unpublished MS. Also Reminiscences of Ezra Cornell, p. 18.

the University of Oxford and Dr. Law was an acknowledged authority in veterinary science at the College of London; yet both were induced to leave these great English schools and cast in their lot with the promoters of a new and untried experiment across the Atlantic. Their continued active interest in the university is a sufficient proof of their satisfaction with the outcome of their decision at that time, while the high esteem in which they are held by all friends of the university and by the country at large is in some degree a testimonial to their labors in behalf of the "new education."

IV.

THE OPENING OF THE UNIVERSITY.

A. THE FORMAL OPENING OF THE UNIVERSITY.

The university was formally opened on Wednesday, October 7, 1868. The day could not but have seemed auspicious to those who had labored for the success of the new educational experiment. It was a perfect Indian summer, with all its soft lights and golden haze and rich foliage, clothing a landscape which for variety and picturesqueness is unsurpassed by the site of any other university in the world. To this scene had gathered a great crowd from all parts of the State and nation, among them men eminent in every field, drawn thither by a deep interest in what then seemed a unique experiment in education. Even Agassiz left his vast laboratories in the Rocky Mountains and appeared, as he then said, "without having had time to shake from his feet the dust of a journey of 6,000 miles." Lieutenant-Governor Stewart L. Woodford, then and now a trustee and warm friend of the university; the Hon. John V. L. Pruyn, chancellor of the University of the State of New York, and the Hon. Abram B. Weaver, State superintendent of public instruction, were present as representatives of the State,[1] while such men as Louis Agassiz, George William Curtis, and Erastus Brooks fairly represented the advanced sentiment of the people in their respective fields.

The two men to whose efforts was chiefly due this assembly of people for such a purpose had to be taken from their beds and carried to the inaugural ceremonies. Mr. Cornell was too ill to stand during the delivery of his opening address, while President White found it difficult at times to support himself at the desk. These two addresses embodied the whole spirit and purpose of the new university. Mr.

[1] Some who were expected were not present. The governor of the State, though he had been in Ithaca the day before, quietly left town on the eve of the opening exercises. His excellency was a very wise man in his day and generation, and evidently felt that it was not best for him to have too much to do with an institution which the sectarian press had so generally condemned. I shall not soon forget the way in which Mr. Cornell broke the news to me, and the accent of calm contempt in his voice." (White: My Reminiscences of Ezra Cornell, p. 28.)

Cornell's words, "I hope we have laid the foundation of an institution which shall combine practical with liberal education, which shall fit the youth of our country for the professions, the farms, the mines, the manufactories, for the investigations of science, and for mastering all the practical questions of life with success and honor,"[1] contain as succinct a statement of the guiding principle of Cornell University as can be found, and are as terse a statement of his own purposes as exists, save his famous phrase, adopted as the motto of the university: "I would found an institution where any person can find instruction in any study."[2]

Mr. White's address dealt at large with these foundation ideas, and elaborated the formative and governmental ideas which should rest upon them. It pledged the university to a policy which should unite liberal and practical education and should establish a perfect equality among widely differing courses of study. It pledged it to a policy of unsectarian education, to a true and courageous study of science, to a firm adherence to truth. It declared war upon pedantry and Philistinism. It appealed to the sober judgment and sound sense of thinking men "in the greatest time and land the world has yet known," and invoked for the work then begun their approval and the blessing of God.

Addresses were also delivered during the exercises of the day by Prof. William Channing Russell, who, until his retirement in 1881, was vice-president of the university and a trusted and valuable counselor of the president; by Stewart L. Woodford, lieutenant-governor of the State; by John V. L. Pruyn, chancellor of the University of the State of New York, of which Cornell University was a part; by Erastus Brooks, who continued to be a faithful member of the board of trustees until his death, in 1886; by Francis M. Finch, then an ex-officio trustee of the university, later a justice of court of appeals of the State of New York, and now dean of the College of Law; by Abram B. Weaver, State superintendent of public instruction; by Professor Agassiz, and by George William Curtis. In the closing words of Mr. Curtis, "the hour had come when this institution was to pass under those influences which perform their daily services in our lives."

The discussions of the "new education," as it was taking form at Cornell, had resulted in the presence at the opening of the university of the largest class that had ever entered any college in this country. Over 400 students pressed for admission. "It was," says President White, "an interesting mass of humanity. Probably no body of students of equal size ever contained more talent, and even genius. That it was, in general, well-regulated talent is seen by the fact that so many of those youths have since attained worthy success; but

[1] Proceedings at the inauguration, p. 4.

[2] This phrase was uttered by Mr. Cornell in a conversation with Mr. White concerning the features of the charter. (Reminiscences of Ezra Cornell, p. 9.)

there were also a considerable number of ill-regulated geniuses, attracted by the novelty of the plan and by the hope of accomplishing unheard-of results without much outlay of intellectual effort on their part."[1]

With this great body of students, with a corps of able and enthusiastic professors, with all yet crude, cramped, and but roughly organized, Cornell University began its work. Laboratories and workshops were elbowing coal bins and ash rooms in the basement of Morrill Hall; lecture rooms were overcrowded; professors were overworked, and trustees were harassed by the pressing questions of greater space, fuller equipment, and larger faculty. But hopes were high and hearts courageous, while dominating all was the serene and untroubled faith of the founder.

B. The First Year.

The register for 1868–69 shows that there were 17 resident professors, 4 assistant professors, 7 nonresident professors, and 5 instructors and assistants. There are 412 students named in the catalogue (though the books of the registrar show 414 matriculates). The tuition fee was $30 a year. Courses of study were science, philosophy, arts; "elective," which are stated to be "intended to give to the student full and entire freedom in the selection of his studies—a freedom every way equal to that which prevails in the universities of continental Europe;" and "special," under which are included agriculture, mechanic arts, civil engineering, physics and chemistry, history and political science, etc. The faculty is divided into "colleges," with a dean presiding over each college group. The colleges named are agriculture, chemistry and physics, history and political science, languages, literature and philosophy, mathematics and engineering, mechanic arts, military science, and natural science.

The actual interest-bearing endowment at this time consisted of $328,000 in the land-scrip fund and $525,000 turned over by Mr. Cornell. During this year Mr. McGraw gave $50,000 for the erection of the building which bears his name. The income for the year could not have been more than $70,000.

In an address at the quarter-century celebration in 1893 Professor Caldwell gives a picture of the conditions existing during the first year:

> Rickety barns and slovenly barnyards offended the senses where the extension to Sibley College is now going up; the second university building, now called White Hall, simply protruded out of an excavation, the top of which reached nearly to the second-story windows at one end. The ventilation of the chemical laboratory, in the basement of Morrill Hall, was partly into the library and reading room above it. An ancient Virginia rail fence traversed the site of this building [the present library] and its neighbor, Boardman Hall. . . . Bridges,

[1] Unpublished MS. in possession of President White.

sidewalks, and even a road between the one university building and Cascadilla, the one home where almost everybody connected with the university lived, either did not exist at all or were only partially completed.

Some of the inconveniences to which the early professors and students were put may be gathered from entries in the daily memorandum book of the business manager, W. A. Woodward. Under date of October 10, 1868, we read:

Examined the road from Cascadilla Place to University Building in company with Professors Cleveland, Prentiss, and Morris, and Major Whittlesey. Report the bridge unsafe and propose to set some students at work on Monday, the 12th, at 2 p. m.

[October 12.] President White wishes to have ventilators in Cascadilla Place to carry off savors from the kitchen.

[October 15.] Complaints are made for want of sash and lights in Cascadilla Building next to parlor and dining-room skylights.

[October 16.] The flooring glass over parlor and dining room in Cascadilla Place is very much needed. The sink in the basement is a great necessity.

[October 19.] Professor Morris complains that room E, his recitation room, is cold and uncomfortable; that he is obliged to remain there five hours at a time and with no fire or means of making any.

Students complain that no water can be had at University Building: they have to go one-half mile for all the water they use.

[October 22.] Major Whittlesey asks to have stoves and register through the floor for professor's dining room, the cost of which will be about $100. I find that we can save this expense by removing them down one flight of stairs to eat.

[November.] C. says the roofs of both buildings leak badly, and that stove holes are not cut in some of the rooms.

[April 20.] Mr. White wishes a bell for Prof. Goldwin Smith's room to enable him to call servants without being obliged to hunt them up.

[May 28.] President White requests me to pay Professor ——— $50. Mr. White promises to become responsible for it.

The work went on, however, notwithstanding these adverse conditions. At the annual commencement eight degrees were conferred, and the next fall there were 609 students ready to avail themselves of the new opportunities, of whom about one-half (293) had gone through the experiences of the first year.

V.

THE ENDOWMENTS OF CORNELL UNIVERSITY.

A. Ezra Cornell and the Land-Grant Endowment.

No sketch of Cornell University would be complete without an account of the brilliant financial management by which Ezra Cornell multiplied the Federal land grant endowment tenfold. That account must necessarily be brief and inadequate, but it may serve to make in some degree clearer the great service which the founder rendered to the university, to the State, and to the nation. It embodies, moreover, an interesting chapter in the general history of the Federal land grant.

1. MANAGEMENT OF THE GRANT BY THE STATE.

Within three years after the passage of the land-grant act in 1862, nearly every Northern State, which had no public lands within its own borders, had received the land scrip representing its endowment under the terms of the act. This scrip representing many millions of acres was at once placed on the market, for, it will be remembered, no State was allowed to locate lands within the jurisdiction of a sister State. The country was in the midst of a civil war, which drew into its armies a vast body of men; only the necessary business of the country could be carried on; settlers were few; land speculation was suspended; prairie and forest were left in their solitude to await the issue of the great national conflict. As, moreover, there was an almost unlimited quantity of public lands subject to entry at one dollar and a quarter an acre, it was obvious that this scrip must be sold at a considerable discount if it was to be sold at all. In fact the scrip fell at once to about 60 cents an acre, and even at that price did not find a ready market.

New York received scrip representing 989,920 acres. Under the authority conferred by the legislature the comptroller of the State had sold 76,000 acres for the sum of $64,440 at the time of the passage of the act chartering Cornell University. This sale was at about 85 cents an acre, but in his report for 1865 the comptroller of the State says that "the sales of the scrip have recently almost entirely ceased in consequence of other States reducing the price to a much lower rate than that at which it is held by this State." In his report of the previous year he had estimated that the scrip would sell for enough to yield an annual income of $40,000. This seems to have been the highest estimate put by any one at that time on the value of the grant in the hands of the State. In the report for 1865 the comptroller recommends that the scrip be retained by the State unsold until such time as a higher price could be obtained.

This was the last of any direct management of the land scrip by the State, for at this point began the far-sighted management on the initiative of Mr. Cornell, which has resulted in an income, not of $40,000 a year, but of over $300,000 a year, with fair promise of a considerable increase in the future.

2. FIRST PURCHASE OF SCRIP BY MR. CORNELL.

In 1865, the same year in which the charter was passed, Mr. Cornell began his efforts for increasing the value of the land-grant endowment. From the report of the comptroller for 1866 it appears that, with the concurrence of the commissioners of the land office, he had sold in the preceding year to Mr. Cornell 100,000 acres at 50 cents an acre, upon the condition that all profits which should accrue from the sale of the land by Mr. Cornell should be paid to Cornell University. This sale and this agreement were made under the general powers

conferred upon the commissioners by the act of May 5, 1863, accepting the grant and authorizing the sale of the scrip. The sale was about 10 cents an acre less than the market price of the scrip at that time, but the agreement of Mr. Cornell to pay all the profits of his investment to the university was considered a fair compensation for the discrepancy.

This sale left still in the hands of the comptroller scrip aggregating 813,920 acres, while the productive funds from the sale of 176,000 acres amounted to $114,440.

3. LEGISLATION OF 1866.

By an act approved April 10, 1866,[1] the comptroller was authorized to fix the price at which he would sell the scrip remaining in his hands, which price should not be less than 30 cents an acre, and to sell the same to the trustees of Cornell University if they would agree to purchase it at the price fixed. In case the trustees would not purchase it, the commissioners of the land office were authorized to sell the scrip to any person who, under a contract satisfactory to them, would purchase it at the price fixed and agree to pay over to the State the whole net profits of the transaction. This act was evidently drawn with a view to the contract subsequently made with Mr. Cornell. The university had at the time no funds available for the purchase of the scrip, nor is it probable that the trustees would then have considered the transaction a proper or safe one for the university to undertake. No application was therefore made by the trustees for the purchase of the scrip. It remained for Mr. Cornell to undertake unaided and alone the mighty task which neither the State nor the university could or would essay.

4. SECOND PURCHASE BY MR. CORNELL.

In a letter to the comptroller, dated June 9, 1866, Mr. Cornell made a proposition for the purchase of the whole of the scrip then unsold. He proposed to purchase the scrip at 30 cents an acre; to sell the scrip, or locate and sell the land represented by it; from the profits of such sales to pay 30 cents an acre into the State treasury to be added to the 30 cents already paid and the sums received from previous sales, the whole to constitute the land-scrip fund and be subject to all the restrictions imposed by the land-grant act of 1862; with the balance of the profits to constitute a separate fund in the State treasury to be known as the Cornell endowment fund, and to be free from the restrictions imposed by the land-grant act.[2] This proposition was, on the 4th of August, 1866, embodied in a contract which was exe-

[1] Laws of New York, 1866, chapter 481.

[2] Report of commissioners, etc., to the convention of the State of New York, 1867, Doc. No. 47. See also Laws and Documents relating to Cornell University, 1892, p. 47.

cuted by Mr. Cornell, and on the 18th of September accepted by the commissioners of the land office.

The object of Mr. Cornell in making this agreement was twofold: First, to secure a larger endowment from the land grant than could be secured by the sale of the scrip in the open markets, and second, to free that portion of it designated as the Cornell endowment fund from the provisions of the land-grant act which forbid the income to be used for "the purchase, erection, preservation, or repair of any building or buildings," and which fasten upon the income a trust for the especial benefit of the departments of agriculture and mechanic arts. This appears clearly in his letter already referred to, where he says:

I shall most cheerfully accept your views so far as to consent to place the entire profits . . . in the treasury of the State if the State will accept the money as a separate fund . . . and appropriate the proceeds from the income thereof annually to the Cornell University, subject to the direction of the trustees thereof, for the general purposes of said institution, and not hold it subject to the restrictions which the act of Congress places upon the fund derivable from the sale of the college land scrip, or as a donation from the Government of the United States, but as a donation from Ezra Cornell to the Cornell University.

That his object was fully secured is shown by the decision of the New York court of appeals in the McGraw-Fiske will case, when the university, in order to save that great benefaction, sought to establish that the Cornell endowment fund was impressed with the trust imposed by the land-grant act, and therefore constituted no part of the $3,000,000 which, by its charter, it was permitted to hold. Upon that point the court held that the Cornell endowment fund is free from the restrictions of the land-grant act and is a part of the general endowment of the university.[1] In this opinion the Federal Supreme Court, upon appeal, concurred.[2]

Under this agreement Mr. Cornell purchased 813,920 acres, making his total purchase 913,920 acres.

5. MANAGEMENT OF THE SCRIP BY MR. CORNELL.

During the years 1866 and 1867 Mr. Cornell withdrew from the hands of the comptroller, for the purpose of locating the lands, scrip representing 432,000 acres. Of this amount he resold before location 6,080 acres, and located 425,920 acres. With the 100,000 acres located under his first contract, he had, therefore in the course of a few years located for the benefit of the university 525,920 acres of land.

During the years 1868 and 1869 he consented, at the earnest solicitations of the university trustees, to sell the 381,920 acres still in the hands of the comptroller, and this amount was transferred direct to the purchaser for 90 cents and $1 an acre. After paying 60 cents an acre into the land-scrip fund, there remained $128,499.20 as the beginning of the Cornell endowment fund.

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[1] Matter of McGraw, 111 N. Y., 115, 129.

[2] Cornell University *v.* Fiske, 136 U. S., 152.

Of the 525,920 acres of land located by Mr. Cornell, 513,920 acres were entered in Wisconsin, 8,000 acres in Minnesota, and 4,000 acres in Kansas. The great bulk of this land was timber land, and was selected only after the most careful examination by experts, and at a great expense, all of which was borne entirely by Mr. Cornell. In addition to the expense of location, the land as soon as located was subject to taxation, while there were heavy expenses in preserving it from the depredations of timber thieves. When the whole matter was investigated by a committee appointed by the governor of the State in 1874, it appeared from their report that from 1865 to 1872 Mr. Cornell had expended $172,225.19 in the location and care of these lands,[1] and he was then not halfway through his gigantic undertaking.

In addition to this large sum Mr. Cornell was obliged to advance the principal sum paid into the treasury upon the purchase of the scrip or to secure it by bonds bearing interest, which sums, with the interest on all the sums otherwise expended, raised the total sum so advanced by him at the time of this report to a half million dollars. So that in seven years after the founding of the university Mr. Cornell had, in addition to his original endowment of $500,000, expended in behalf of the university another $500,000, besides bearing for its sake the heavy burdens of his great undertaking.

6. ATTACKS UPON MR. CORNELL.

It might be supposed that so noble an effort for humanity would win only grateful applause. But, unhappily, Mr. Cornell received for a time a far less just and appropriate recompense. For a series of years his motives were impugned, his character traduced, and his conduct made to appear as that of a scheming "land grabber" and a selfish swindler.

The State convention which met in 1867 for the revision of the constitution incorporated in its amendments a clause guaranteeing the inviolability of the land scrip fund and the Cornell endowment fund. This revised constitution came before the people for adoption or rejection in 1869. On the 26th of October, a few days before the vote was to be cast, a paper published at Rochester contained in its editorial columns a lengthy article declaring that these constitutional provisions "are intended to cover up and perpetuate, by their incorporation into the organic law, one of the most stupendous jobs ever 'put up' against the rights of the agricultural and mechanical population of the State." After stating, or rather misstating, the facts as to the founding of the university and the contract for the sale of the scrip, the article proceeds:

But what becomes of the twenty-three millions [*sic*] and over of the balance to

[1] Documents of the Senate, 1874, No. 92, p. 19. This report is the authority for most of the figures in this chapter.

be realized out of these lands? The answer is plain. It belongs and will go to the Cornell family. Already Mr. Cornell has been to the legislature to secure the passage of an act incorporating a great land company of which he is chief. To this company he will sell these lands, fixing his own price, and his company will make from twenty-five to thirty millions of dollars. It can be easily seen how a man with little or no money invested, with such an enormous land fund put into his hands to manage as he sees fit, can afford to divert public attention from his real object by turning it toward a great institution of learning which he is founding. . . . Having passed his bill and secured the fruits of the job, it required vigilant watching to keep the booty secure. Some future legislature might scrutinize this transaction. The people might find out how they had been plundered and attempt a recapture of some part of the stolen property. All this would be unpleasant to Mr. Cornell, so he hits on the idea of perpetuating the job by putting it in the new constitution. He labored long and patiently for this. At length, by giving the chairman of the committee "on education and funds relating thereto" in the convention, Mr. George William Curtis, an ornamental professorship in the university, and Prof. Theodore W. Dwight, also a member of the convention, another ornamental professorship in his university, both of which are supposed to bear substantial salaries, with a trusteeship thrown to Horace Greeley, powerful advocates were secured, and the thing was put into the constitution.[1]

This remarkable article, after its base charge against Mr. Cornell and its insane insinuations against Mr. Curtis, Mr. Dwight, and Mr. Greeley, closes with a warning to the people to reject the constitution and to refuse to elect Mr. Greeley to the comptrollership, an office for which he was a candidate.

To this tirade Mr. Cornell replied in a letter remarkable for its simple and quiet dignity. He explained fully his dealings with the land scrip, his efforts to sell the land, and his hopes as to the final outcome of his undertaking. His only reference to the personal abuse contained in the article is in the concluding paragraph of his letter, where he says:

As to the other charge of "swindling," "corruption," etc., etc., permit me to say that I have lived in this State from my birth—more than sixty years. I have had personal relations with great numbers of my fellow-citizens, and official relations with all of them. To their judgment on you and me I leave your epithets of "swindler" and "corruptionist."

This scurrilous attack was not destined to be the last. On the 12th of May, 1873, a bill was introduced into the assembly providing for a settlement between Mr. Cornell and the State. The fact was that Mr. Cornell's health had broken under his heavy burdens, and he was now desirous of closing his accounts with the State and transferring the lands to the trustees of the university. It was with this ultimate end in view that the bill was introduced. Its introduction, however, was the signal for an unexpected and bitter attack from the representative of the district in which the People's College was situated. He rose, upon the introduction of this bill, and, in a speech which lasted more than an hour, denounced the whole proceeding, from first to last, as iniquitous and corrupt, and charged that Mr. Cornell had

[1] Rochester Daily Union and Advertiser, October 26, 1869.

abused his position in order to speculate with the lands for private gains; that he had presented no accounts to the State, and that the act of Congress donating the lands had been violated by the university. This speech was fully reported in the New York papers, and was, of course, widely circulated throughout the State.[1]

When the daily papers brought the account of this attack to Mr. Cornell's notice, he at once wrote and telegraphed to Governor Dix asking for an immediate investigation by a commission of citizens to be appointed by the governor.[2] On the 15th of May Mr. Alonzo B. Cornell, the eldest son of Ezra Cornell, and at that time speaker of the assembly, asked unanimous consent to introduce a resolution for the appointment of an investigating committee with Horatio Seymour at its head. Only one objection was heard, that of the member who had made the charges, but this, under the rules, was sufficient to defeat the resolution. The fact was that this member had drawn and had introduced into the senate a resolution for the appointment of an investigating commission, and had named as commissioners certain public officials alleged to be inimical to Mr. Cornell.[3] The senate resolution was so amended as to leave the appointment of the commissioners in the discretion of the governor. It was further amended in the assembly so as to devolve on the commissioners the duty of investigating the general condition of the university, and especially as to the department of agriculture and mechanic arts.[4]

The attack on Mr. Cornell made a profound sensation throughout the State. The New York Times said, editorially:

> If, as Mr. McGuire charges, a great speculation has been concealed under the pretense of beneficence, Mr. Cornell will lose the high character he has hitherto borne; if Mr. McGuire can not sustain his charges with conclusive evidence, he sinks into public contempt as a common slanderer.[2]

After the accuser had objected to the resolution in the assembly for the appointment of a commission, the same paper said: "Mr. McGuire has already proved himself unworthy of public credence." President White on May 16, three days after the attack, called together the students of the university and in a singularly able address laid before them and the public generally a full history of Mr. Cornell's relation to the land grant.[5] In general the charges seemed to have been received with incredulity, although they were repeated both in the assembly and in the senate.

The committee appointed by the governor consisted of Horatio Seymour, William A. Wheeler, and John D. Van Buren—names too well

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[1] See New York Times, May 13, 1873.

[2] Ibid., May 15, 1873.

[3] Ibid., May 16, 1873; May 21, 1873.

[4] Senate journal, 1873, pp. 982, 1021, 1059, 1060; assembly journal, 1873, pp. 1857, 1925.

[5] The address appears in full in the New York Times for May 23, 1873.

known in American history, especially the first two, to need comment. Mr. Seymour and Mr. Van Buren were lifelong political opponents of Mr. Cornell and could have no reason for fear or favor in their investigation.

After a most exhaustive and searching examination, during which the member of the assembly who had made the charges had every opportunity to prove them, the committee made its report on April 16, 1874. Two reports were made, which differ only in the view they hold as to the relation of the State to the Cornell endowment fund, Mr. Seymour contending that the State should be relieved of all the care and responsibility connected with that fund, and from any, even indirect, interest in lands situated within another State. Upon the points involving the charges against Mr. Cornell there was but one opinion. Mr. Seymour declares that—

> It is due to Mr. Cornell to state that none of the witnesses or parties who appeared before the committee comp ained that he had sought to gain any pecuniary advantage to himself or to his family in the management of the property under his control. On the contrary, those who object most strenuously to the propriety of his management, the character of his contracts, and the objects aimed at by the legislation he sought or obtained disclaim any purpose to charge that he has enriched himself.[1]

There is not a word in either report which reflects in the slightest degree upon the character or conduct of Mr. Cornell, while the recommendations contained in them were mainly in line with the purposes which he was desirous of accomplishing.

This was the last violent attack upon the founder, but up to the very year of his death the paper already quoted continued periodically to assail him with epithets of "land jobber" and "land grabber." "But," says Mr. White, "he took these foul attacks by tricky declaimers and his vindication by three of the most eminent fellow-citizens with the same serenity. That there was in him a profound contempt for the wretched creatures who assailed him and imputed to him motives as vile as their own, can hardly be doubted; yet, though I was with him constantly during this period, I never heard him speak harshly of them, nor could I ever see that this injustice diminished his good will toward his fellow-men and his desire to benefit them."[2]

7. TRANSFER OF THE LANDS TO THE UNIVERSITY.

In October, 1874, the commissioners of the land office approved the proposed transfer of the lands from Mr. Cornell to the university. This was soon after accomplished, and when the founder breathed his last, on December 9, 1874, he passed away in the full assurance that the great work he had undertaken, and had borne alone for nearly ten years, was accomplished.

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[1] Minority report, senate docs., 1874, No. 93, p. 8. See also majority report, senate docs., 1874, No. 92.

[2] My reminiscences of Ezra Cornell, pp. 36–37.

But was it? He transferred with the lands the cost of their purchase, location, and care, a sum in excess of $576,000. Each year they were held added $50,000, $60,000, and in one year over $90,000 to the outlay. For seven years the university bore the burden of this vast, unproductive, expensive endowment. It borrowed from its endowment fund to carry its land endowment. The income could not pay the running expenses of the university and the cost of caring for the land and paying taxes upon them. Nearly $400,000 had been taken from the productive funds to carry the university and its lands down to 1881. It seemed as if the founder's gigantic undertaking might result in the final ruin of his university.

Fortunately for the university and for the outcome of Mr. Cornell's great plan, the chairman of the board of trustees, Henry W. Sage, had a faith equal to that of the founder and a knowledge and experience in timber lands providentially fitting him to carry on the founder's work. For seven years he waited, often in the face of bankruptcy itself, for the outcome he believed to be assured. Once he set himself against the wishes of his colleagues and persuaded them to allow an option that would have brought in a million and a quarter of dollars to lapse. He believed that more would be realized for the 275,000 acres covered by the option. His belief was justified. Pine timber, which had been selling for not more than $1 a thousand on the stump in 1880, rose rapidly in the next year. In 1881 and 1882 the university sold about 140,000 acres for over $2,300,000. The productive funds of the university were trebled by this transaction and from this time on the financial skies grew steadily clearer.

Great as have been Mr. Sage's benefactions to the university—and he gave it outright $1,175,000—his services in the handling of the great land endowment are of equal or even greater value and entitle him to the lasting gratitude of the friends of higher education.[1]

In 1881 the legislature transferred the custody and care of the Cornell endowment fund to the university trustees, thus accomplishing fully Mr. Cornell's purpose of making this fund a general endowment for all the needs of the institution.

8. RESULTS OF MR. CORNELL'S UNDERTAKING.

When Messrs. Seymour, Wheeler, and Van Buren made their report upon the management of the land grant in 1874, they all agreed that if the total outcome of Mr. Cornell's management was an endowment of $1,000,000 their expectations would be more than realized. Just three days before the twenty years fixed by Mr. Cornell's contract with the State the value of the lands then sold amounted to over

[1] Mr. Sage died September 18, 1897, after having served the university over twenty-seven years as trustee, during twenty-two of which he was chairman of the board.

three and three-quarter millions of dollars. Mr. Cornell had himself estimated the total outcome of his undertaking at only two and one-half millions.[1]

By a report of the land committee of the university trustees, dated October 6, 1893,[2] it appears that the total amount realized from the sales of lands to August 1 of that year was $5,566,949.81, while the cost of locating and maintaining the lands was $1,370,331.95, leaving a total profit of $4,196,617.86. There was then unsold 157,449.44 acres, estimated at $722,534.66. The grand total of Mr. Cornell's giant undertaking was therefore $6,289,484.47, netting about $5,000,000. To this must be added the land scrip fund which would bring the total up to $5,700,000.

No other State can show so good a result. New York, through Mr. Cornell's management, obtained an average of $6.73 an acre. Kansas, with 90,000 acres, obtained $5.57 an acre; California, with 150,000 acres, obtained $5.14 an acre; Minnesota, with 120,000 acres, obtained $4.39 an acre; Iowa, with 240,000 acres, obtained $2.70 an acre; Michigan, with 240,000 acres, obtained $2.50 an acre; no other State reached an average of $1.75 an acre, while thirteen States obtained not to exceed an average of 60 cents an acre. The total product of the grant, exclusive of New York's share, amounted to $9,204,897.51, or less than one and one-half times the total realized in New York alone.[3]

This achievement of Mr. Cornell is perhaps as great a piece of financiering as was ever undertaken and consummated for purely philanthropic purposes, and fully justifies the remark of his colleague, President White, that—

> Like the great prince of navigators in the fifteenth century, he might be described as a man "who had the taste for great things"—"qui tenia gusto en cosas grandes." He felt that the university was to be great, and he took his measures accordingly.

B. The Land Scrip Fund.

The land scrip fund, consisting of the amounts received by the State for sale of scrip prior to the contract with Mr. Cornell and the amounts paid into the fund by Mr. Cornell under his contract, in all $473,420.87, remained, after the transfer of Mr. Cornell's contract to the university in 1874, and the transfer of the Cornell endowment fund to the university in 1880, in the hands of the State. As early as 1876 a difference of opinion arose between the comptroller and the

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[1] Letter to Comptroller, dated June 9, 1866.

[2] Proceedings of board of trustees, 1890, p. 286. The report of the treasurer for 1898 shows $4,513,289.20 in the Cornell endowment fund, 155,194 acres of land unsold, estimated at $600,000, and $688,576.12 in the land scrip fund, making a grand total of $5,801,865.32. The estimate of 1893 is therefore more than confirmed by the results in 1898.

[3] History of the agricultural college land grant, by S. D. Halliday, Ithaca, 1890, pp. xvi–xviii. These figures are in some cases estimated, but in all cases upon date furnished by the proper State authority to Mr. Halliday.

university trustees as to the legality of charging the revenue of the fund with the premiums paid on investments.[1] The result was a friendly suit to test the question in which the court of appeals decided that the comptroller was not justified in so charging the cost of investment against the revenue of the fund.[2] The legislature thereupon, in 1891, appropriated to the university the sum of $89,383.60, that being the amount of income theretofore withheld by the State to cover such expenses. It is this fund that made the law school building (Boardman Hall) possible.

The question still remained open, however, whether, in case investments could not be secured at 5 per cent, the State was under an obligation, arising from its acceptance of the land grant, to pay 5 per cent net to the university. To put an end to this doubt the legislature of 1894 passed an act covering the fund into the State treasury, and agreeing to pay thereafter 5 per cent on the fund to the university. This act was, however, vetoed by Governor Flower.[3] A similar act was passed in 1895 and became a law.[4] The result was that the securities in which the fund was invested were sold, and the proceeds, together with sums thereafter paid into the fund under the contract, became a part of the general fund of the State, for which certificates were issued to the university bearing interest at 5 per cent. This secures, therefore, a permanent 5 per cent investment on this fund. A final settlement with the State, anticipating payments on lands yet unsold and adding the premium on the securities sold, fixed the fund at $688,576.12, for which amount the university now holds the bond of the State.

C. Additional Federal Endowments.

In 1887 Congress passed an act entitled "An act to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an act approved July 2, 1862, and the acts supplementary thereto." The act appropriates to each State the sum of $15,000 annually out of the proceeds of the sales of public lands for the establishment and maintenance of such a station at the land-grant colleges. It provides, however, that in States having such colleges, and having also agricultural experiment stations separate from such colleges, the State may apply the benefits of the appropriation to the stations so separately established. This grant New York promptly accepted[5] and subsequently appropriated to Cornell University[6] "as the college within this State solely

[1] Comptroller's report, 1876. See laws and documents relating tc Cornell University (1892), p. 154.

[2] Reported in 117 N. Y., 549.

[3] See Governor Flower's public papers, 1894, p. 92.

[4] Laws 1895, chap. 78.

[5] Concurrent resolution, March 30, 1887. Laws of New York, 1887, p. 943.

[6] Laws of New York, 1889, chap. 558; Laws 1893, chap. 383, sec. 87.

entitled to receive the benefits of the act." The right of Cornell to the "sole" benefits of the act was contested by the agricultural experiment station at Geneva, which yearly sought to divert to itself a part of the fund. In this it was unsuccessful until 1894, when the legislature divided the fund, giving nine-tenths to Cornell and one-tenth to the Geneva station.[1] The decisive argument in favor of the division was found in the fact that, under the provisions of the act of Congress, the publications of the beneficiaries of the grant are entitled to free postal facilities, and by this division the Geneva station became a sharer in this privilege.

In 1890 Congress passed an act appropriating to each State having a land-grant college established under the act of July 2, 1862, the sum of $15,000 for the year ending June 30, 1890, to be increased by $1,000 yearly for ten years, and thereafter to be $25,000 annually. The appropriation is "to be applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction."[2] New York accepted the grant and appropriated it to Cornell University as the only land-grant college in the State.[3] By the action of the trustees, taken June 5, 1894, it was decided that $10,000 of the fund should go to mechanic arts, $10,000 to agriculture, and the surplus to the remaining subjects named in the act.[4] After 1900 the fund will amount to $25,000 annually. After that year the Federal Government will therefore appropriate each year to the State of New York $40,000, of which, under the present arrangement, Cornell will receive $38,500.

D. New York State Endowments.

New York State has been singularly indifferent to the welfare of her greatest university. Down to the year 1893 she never gave it a dollar out of her own treasury. The land grant with its two funds—the Cornell endowment fund and the land scrip fund—was the gift of the Federal Government. Its true value is represented by the land scrip fund. The Cornell endowment fund is the creation of Ezra Cornell.

Yet during this whole period Cornell was under obligation to educate, free of charge, 512 students annually, besides all students in agriculture—an obligation representing an annual expense of over $50,000.

The State, urged on by the vigorous policy of President Schurman, is beginning to awake to its duty in this regard. In 1893 it appropri-

[1] Laws 1894, chap. 376.

[2] 26 U. S. Statutes at Large, p. 417; Laws 1890, chap. 841.

[3] Laws of New York, 1891, chap. 56.

[4] Proceedings of board of trustees, 1890, pp. 320, 321, 329.

ated $50,000 for an agricultural building. In 1894 it established at Cornell University a veterinary college, and appropriated $50,000 for a building. This college is, by the terms of the act, to be a State college, but is to be administered by the trustees of Cornell University. The trustees of the university accepted the responsibility of administration, and consented to the location of the college on the university grounds, but without undertaking any financial responsibility for the maintenance of the institution.[1] In 1895 a further appropriation of $100,000 was made for the completion and equipment of the veterinary college building, and annual appropriations of $25,000 have since been made for its maintenance. In 1898 the New York State College of Forestry was established at Cornell by act of the legislature, and a demonstration area in the Adirondacks provided for.

E. Private Endowments.

Cornell University has been unusually fortunate in the number and generosity of those who have aided in building up her endowments. It is very rare indeed in the history of educational institutions that the work of one man's hands is so quickly strengthened by the work of many hands. Until a university has a body of alumni able to come to its support, it is usually left to the sole care of its founder or his immediate family. It is only the older universities that are wont to receive the benefactions of private individuals. Cornell has received a goodly measure of such gifts. Many of these can never be estimated in money value. Many which came in the form of money had at the time a value far higher than that affixed in the exchanges.

Of the latter was the gift made by Hiram Sibley, a citizen of Rochester, on the occasion of the publication in a Rochester paper of a savage attack on Mr. Cornell. Immediately upon the appearance of the article, Mr. Sibley wrote:

> I know that the charges recently published are utterly untrue, but I am not skilled in newspaper controversy, so I will simply add to what I have already given to the university a special gift of $30,000, which will testify to my townsmen here, and perhaps to the public at large, my confidence in Mr. Cornell.[2]

Similar in spirit was the gift of Mr. Sage, which made possible the beginnings of coeducation. Similar, too, the earliest gift of all, after Mr. Cornell's, the beautiful chime of bells, whose sweet jangling was the first greeting Cornell gave to her gathering sons. And of like quality was the gift of the "Ostrander elms," planted on the campus by John B. Ostrander after he had reached his three score years and ten, and which Mr. Sage has said, "always had for me a fragrance akin to that of the widow's mite immortalized in Scripture."[3] The

[1] Proceedings of Board of Trustees, 1890, pp. 330–3.

[2] White: My Reminiscences of Ezra Cornell, p. 34.

[3] See the address of Mr. Sage at the inauguration of President Adams, for these and many more instances of noble gifts whose value is beyond all price.—Proceedings and Addresses at Inauguration, etc., pp. 43–46.

large gifts of service by Mr. Cornell, Mr. White, Goldwin Smith, Mr. Sage, and many others, are simply beyond price, as is also the gift of the President White Library, to duplicate which, if that be possible, would require years of patient search and devotion. All these things have gone into the permanent endowment of Cornell University, and will remain as the inalienable heritage of scholars forever. They belong to that noble wealth of universities and of nations which is transmitted into human lives and human character.

Ezra Cornell's gifts have already been mentioned. The endowment of $500,000 was supplemented by a farm of over 200 acres of land, on which the university was built. In addition to the great endowment, the chief source of the university's income, growing out of his management of the land grant, minor gifts were quietly made by the founder from time to time during his lifetime. Altogether his gifts mounted up to $670,000, besides the profits on the land contract. Including that, the endowments provided by Mr. Cornell will probably aggregate five and a half or six million dollars.

Henry W. Sage stands next to Mr. Cornell in the amount of endowment provided and in the unwearied interest shown in the management of the financial affairs of the university. He took on his own shoulders mainly the management of the lands when Mr. Cornell could no longer carry it, and to his ability, experience, and devotion is due in large measure the endowment resulting from that source. In addition, Mr. Sage has given in buildings, books, equipment, and money about $1,200,000. Of this amount $650,000 is in permanent endowment and the balance in buildings and equipments or represents money paid into the general fund.

Andrew D. White has probably given as largely, in proportion to his fortune, as any benefactor of the university. The president's house, the President White historical library, the architectural library, the Spinoza collection, and numerous gifts of smaller collections, the bronzes and furnishings of the Christian association rooms, the university gates, and frequent gifts of money in considerable amounts bring his donations up to a money value of $200,000.

Hiram Sibley's donations were mainly for the college of mechanical engineering which bears his name, though $20,000 was given to the general fund. In all, his gifts amount to over $155,000.

Hiram W. Sibley has carried on the work begun by his father. Already his gifts to Sibley College amount to over $70,000.

John McGraw gave, in addition to moneys for the general fund, the building which bears his name. His total donations exceeded $140,000.

Goldwin Smith, during his connection with the university, gave to it his own private library, and added from time to time gifts of books and money.

The Cascadilla Company, composed mainly of citizens of Ithaca,

SAGE COLLEGE—WOMEN'S DORMITORY.

Padgham for an undergraduate scholarship, and the fund of $5,000 by ex-Governor Flower for a library of veterinary medicine.

The library has been the beneficiary of many gifts. Aside from those already mentioned are the following: A Rhæto-Romanic collection and a Dante collection, by Willard Fiske; a mathematical library, by William Kelly; an architectural library, by President White; a slavery collection, by Rev. Samuel J. May; a fund of $1,000, by George W. Harris, for a collection of Victorian poets; a collection on Celtic literature and philology, from Prof. E. W. Evans; a collection on Russian history, by Eugene Schuyler; a collection on romance philology, by Prof. T. F. Crane. Other donors are Theodore Stanton, Mrs. Elizabeth Pease Nichols, Richard D. Webb, W. L. Burt, Emil Schwertfeger, C. D. Cleveland, George L. Burr, H. B. Lord, and many others. Professor Burr has steadily donated his salary as librarian of the President White Library to the purchase of books for that collection, an amount very considerable in the aggregate.

F. Summary of Endowments and Gifts.

The following tables represent the total result of endowments, gifts, and grants to Cornell University during the first thirty years of its existence. Many of the gifts are roughly estimated in dollars as they appear on the donation list kept by the treasurer of the university.[1]

Federal grants:		
Land scrip	$688,576.12	
Experiment station appropriations[2]	144,000.00	
Industrial fund appropriations	171,000.00	
		$1,003,576.12
New York State grants:[3]		
Dairy house	50,000.00	
Veterinary college	150,000.00	
Veterinary college appropriations	50,000.00	
		250,000.00
Cornell land contract:		
Profits to August 1, 1898	4,513,289.20	
155,194.61 acres unsold (estimated)	600,000.00	
		5,113,289.20
Private gifts:		
Ezra Cornell	669,555.01	
Henry W. Sage	1,175,290.79	
Andrew D. White	200,580.47	
Daniel B. Fayerweather[4]	295,000.00	

[1] For a very full list of gifts to 1873, many of which are not included in this table, see statement presented to investigating committee, Senate Docs. 1874, No. 103, pp. 287-290. The aggregate there shown is $1,433,457.16.

[2] All appropriations include those available down to August 1, 1898.

[3] Appropriations have been made for horticultural and agricultural experiments, and instruction throughout the State to be conducted under direction of the departments at Cornell. These are not included. It should be noted that the veterinary college belongs to the State and not to Cornell University. The college of forestry, established by laws of 1898, also belongs to, or reverts to, the State.

[4] Cornell will yet share to the extent of from $25,000 to $40,000 in the undistributed residue of the Fayerweather estate.

Private gifts—Continued.		
Hiram Sibley	$155,636.09	
John McGraw	140,177.50	
Dean Sage	113,050.76	
William H. Sage	105,595.75	
Hiram W. Sibley	71,500.00	
Alfred S. Barnes	45,000.00	
Cascadilla Company	35,000.00	
Willard Fiske	30,404.00	
Mrs. D. Boardman and Mrs. George R. Williams	25,000.00	
Goldwin Smith	13,118.40	
Jennie McGraw	5,912.50	
Roswell P. Flower	5,000.00	
Amos Padgham	3,000.00	
Mrs. A. D. White	2,570.00	
Stewart L. Woodford	2,500.00	
Douglass Boardman	2,000.00	
Mrs. A. S. Barnes	1,000,00	
E. A. Fuertes	1,000.00	
George W. Harris	1,000.00	
Various small gifts (estimated)	25,000.00	
		$3,123,891.27
Grand total		9,490,756.59

Some of these gifts have gone into permanent improvements, some into equipment, some into current expenses, and some into productive investments. The report of the treasurer for 1898 shows the property, estimating the present worth of lands, buildings, and equipment, much of which has been paid for by income, to be as follows:

Invested funds	$6,356,674.30
Surplus fund	30,449.46
Surplus current income	59,694.45
Real estate (estimated)	1,796,372.86
Equipment (estimated)	1,135,308.12
Western lands (estimated)	600,000.00
	9,978,499.19

The income for 1897–98 was as follows:

Investments and rents	$386,051.89
Tuition and fees	151,367.71
Federal grants	36,742.87
Donations	7,000.00
Other items	1,888.26
	583,050.73
Veterinary college appropriation	25,000.00
	608,050.73

In addition Cornell acted as trustee of the State in the expenditure of $35,000 appropriated for the promotion of agricultural knowledge in extension work done under the direction of the Cornell college of agriculture.

This result for the thirtieth year of the university is in sharp contrast with the poverty of the first half of the period of its existence. Again and again it seemed during those years that the university would be obliged to declare itself bankrupt. The income was so far below the needs that a debt of $155,000 could be paid only by the subscriptions of the friends of the university—Messrs. Cornell, White, Sage, McGraw, and Sibley. In 1873 the income was $101,000, the expenditures $106,089.12.[1] The tuition fees in that year amounted to but $18,000. In 1881 the actual income was only $100,000, of which but $14,750 was from tuition. Large inroads had been made upon the capital to carry the university and its land. But thereafter conditions rapidly improved. The great land sales of 1881–82 swelled the productive funds to three times their former amount. From this time on the financial skies grew steadier.

This is the result of thirty years' generous benefactions and wise management. At the outset the university started with a cash endowment of $500,000 and land scrip valued at $600,000. To-day its property is valued at nearly $10,000,000, its annual income is nearly $600,000. Two men share the honor of accomplishing the largest measure of this splendid result, Ezra Cornell and Henry W. Sage. While they stand easily first among those who have assured the financial prosperity of the university, the gratitude of all good citizens is also due to the other benefactors who have aided in the upbuilding of the material resources and prosperity of Cornell.

VI.

THE DEPARTMENTS, COLLEGES, AND FACULTIES OF CORNELL.

Reference has already been made to the plan of organization outlined by Mr. White and adopted by the trustees. In order to bring together the salient facts connected with the development of this plan a sketch of the courses of study, the departments of work, and the personnel of the faculty seems necessary.

A. Courses of Study.

1. THE ACADEMIC COURSES IN ARTS AND SCIENCES.

The academic courses in arts and sciences have been of four types: (1) The arts or classical course, requiring Greek and Latin; (2) the philosophy or literature course, requiring Latin but replacing Greek by the modern languages; (3) the science course, requiring the modern languages, mathematics, and natural sciences; (4) the science and letters (or letters) course, requiring the modern languages, literature, philosophy, and elementary mathematics and sciences. To these

[1] Report of treasurer before investigating committee. N. Y. Senate Doc., 1874, No. 103, pp. 342, 343.

should be added the elective or optional course (or absence of specified course), although this had but a brief and apparently unsuccessful career.

As to these last courses it was announced that any student might freely choose all his work for himself, subject only to the conditions of taking such subjects as he was fitted to pursue and of attending three exercises daily. "These elective courses," it was added, "are intended to give to the student full and entire freedom in the selection of his studies—a freedom every way equal to that which prevails in the universities of continental Europe." Degrees were to be conferred when a student had completed a course equivalent to either of the general courses, and that degree which best corresponds to the nature of the work pursued. The same arrangement practically prevailed down to 1873–74, when a more guarded statement as to elective courses—or as they now begin to be termed, optional courses—appears, and in 1875–76 the student is plainly told that if he intends to graduate at all he "should by all means select the course that leads to the degree he expects to take, and follow it in the order laid down; the disadvantages of doing otherwise are so great as to render success almost impossible." This admonition is repeated down to 1878–79, when all suggestion that there is even a possibility of a student's graduating in an optional course disappears, and "optional" students from then on simply mean those who are not candidates for a degree.

The arts course continued its characteristic features down to the legislation of 1896, referred to hereafter.

The courses in philosophy and literature appear first under the name "philosophy" (1868–1871); then under the name "literature" (1871–1874); then as two separate courses leading to the separate degrees (1874–1885); then as philosophy (1885–1896).

The science course maintained its leading characteristics from 1868 to 1896.

The science and letters course first appears in the register for 1876–77 and after 1885–86 is known as the course in letters. Prior to the latter date the degree given was bachelor of science in science and letters; thereafter the degree was bachelor of letters. The course was a cross between the course in philosophy and literature and the course in science. Its distinguishing features were the requirement of the modern languages, literature, philosophy, history, and political science, with some elementary mathematics and natural sciences. It was abolished by faculty legislation of 1894, to take effect with the class entering in the fall of 1896.

At first the work in each of these courses was all prescribed. Specialization was therefore impracticable. To remedy this, special courses (in science particularly) were laid down. We find at different times special courses in mathematics, chemistry and physics, natural history, and in history and political science. Later, however, the prac-

tice begins of having elective hours in the latter years of each course, thus enabling the student to arrange his own "special" course, and the prescribed special courses disappear. In 1873–74 the arts course exhibits a guarded scheme for elective work by printing a list of subjects among which the student may elect his hours. In 1875–76 all is elective after the first year, except Greek and Latin for the sophomore year and about five hours in philosophy and literature in the junior and senior years. This goes on with some fluctuations down to about 1886, when from four to six hours (out of a requirement of fifteen) are made elective in the second year and practically all of the third and fourth years, except some required work in English. Elective work in the other courses advanced more slowly. Five hours a term (out of the required fifteen) were allowed in science in the senior year down to about 1876. Then the option among prescribed courses was given. After about 1886 the elective hours increase rapidly. The same is true of the courses in philosophy and literature. After 1885–86 the last two years of all the general courses present a wide range of electives.

During the period from 1868 to 1896 the courses in science and science and letters, which at first had entrance requirements considerably below those in arts and philosophy, had gradually raised their requirements toward the level of the classical courses. At the same time each of the four courses had gradually enlarged the electives allowed until in each the last two years were practically free from required work. These changes brought the four courses (or the three after the abolition of "letters," in 1894) into practical equality of entrance requirements and requirements for a degree. In 1896 the final step was naturally and logically taken by fixing a uniform entrance requirement for all students matriculating in arts and sciences in and after 1897, requiring no specified work in course except military drill, gymnastics, and thesis, and conferring the single degree of bachelor of arts on all students who completed the requisite number of hours. The result was the abolition of all "courses" of study in the academic department and the substitution of the uniform entrance requirement (consisting, however, of elective groups), the free elective system, and the uniform degree. The evolution of the arts and sciences curriculum has been marked therefore by three distinct stages: (1) Parallel specified courses; (2) parallel courses with increasing electives; (3) the abolition of "courses" and the establishment of the free elective system.

2. THE TECHNICAL AND PROFESSIONAL COURSES.

The technical and professional courses have been conducted by the following departments:

(1) Agriculture, known as the college of agriculture down to 1874, then as the department of agriculture to 1888, and since as the college of agriculture.

CORNELL UNIVERSITY—LINCOLN HALL (CIVIL ENGINEERING AND ARCHITECTURE).

(2) Mechanical engineering, known as the college of mechanic arts down to 1871, then as the Sibley College of Mechanic Arts down to 1886, and since as the Sibley College of Mechanical Engineering and Mechanic Arts. A course in electrical engineering was established in the college in 1883–84.

(3) Civil engineering first appears as the school of civil engineering in the college of mathematics and engineering (1868–1871), then as the "college of civil engineering and architecture (1871–1873, then as the department or faculty of civil engineering (1873–1890, and thereafter as the college of civil engineering.

(4) Architecture, which was at first included under civil engineering, became a separate department in 1873, and since 1896 has been known as the college of architecture.

(5) Law, established as the school of law in 1887, has been known as the college of law since 1896.

(6) Veterinary science, which was included under agriculture, became a separate college in the fall of 1896 under the style of the New York State Veterinary College.

(7) The medical college, established in 1898, began work in the fall of that year. Previously there had been a special course known as the medical preparatory course conducted by the department of physiology and zoology.

(8) The New York State College of Forestry was established in 1898, and is now in its first year.

The "special courses" appearing in the earlier registers under the head of "chemistry and physics," "natural history," etc., are merely specialized forms of the general course in science and are not to be taken as technical or professional courses.

The use of the term "college" to describe the various departments of instruction was introduced at the beginning of the university, and in the first register (1868–69) we find the college of agriculture, the college of mechanic arts, the college of chemistry and physics, the college of history and political science, the college of languages, the college of literature and philosophy, the college of mathematics and engineering, the college of military science, and the college of natural science. They reappear in the same form in 1869–70, 1870–71, and, with the addition of the college of civil engineering and architecture, in 1871–72 and 1872–73. Thereafter they are spoken of as "courses of instruction" or "departments," with the exception of "Sibley College," which, however, seems to be used to describe the building of that name rather than the department of instruction.

3. GRADUATE COURSES.

During the early history of the university, graduate instruction was neither very considerable in amount nor systematic in character. The first register announces that advanced degrees will be given as

follows: Master of Arts, Master of Science, Civil Engineer, and Doctor of Philosophy. To these were added in 1872–73 Doctor of Veterinary Medicine, and Architect. The latter disappears in 1875–76. Doctor of Science appears in 1876–77. Only nine doctor's degrees were conferred down to 1885.

With the increase of the faculty and facilities for instruction the amount and character of graduate work was steadily raised. The establishment of fellowships and graduate scholarships led to an increase in the number of students pursuing graduate courses. During 1897–98 there were 154 students in the graduate department, and in that year advanced degrees were conferred as follows: Master of Arts, 10; Master of Science, 1; Master of Science in Agriculture, 5; Master of Civil Engineering, 3; Master of Mechanical Engineering, 2; Master of Laws, 5; Doctor of Philosophy, 23. Hereafter the following degrees will be conferred: Master of Arts, Master of Science in Architecture, in Civil Engineering, in Mechanical Engineering, and in Agriculture; Doctor of Philosophy.

The graduate department is now under the jurisdiction of the university faculty and the personal supervision of its dean.

B. Requirements for Admission to Courses.

The requirements for admission to the university have varied widely among the different courses. In arts the requirements have been from the first as high as at any other university. In philosophy and literature they were, until about 1881, lower than in arts by the omission of Greek. After that date a requirement in modern languages or mathematics was adopted as an equivalent for Greek. In letters (and science and letters) and in science the requirement, down to 1876, was primary. After that date there is a requirement of a modern language or advanced mathematics, and in 1888 there is a requirement of two modern languages or one language and advanced mathematics. In 1895–96 the requirement in these courses was (in addition to primary subjects) two of the following subjects: Advanced French, advanced German, advanced mathematics. In 1896–97 a uniform requirement was adopted in the department of arts and sciences as follows: The primary subjects; one of the following groups: (1) Latin and Greek; (2) Latin, advanced French, or advanced German; (3) advanced French, advanced German, and advanced mathematics. Agriculture required only primaries down to 1888–89; after that date its requirement is the same as in science. Architecture and mechanical engineering required only primaries down to 1887–88, when solid geometry was added. In 1890–91 elementary French or German was added. Since 1893–94 solid geometry, advanced algebra, plane and spherical trigonometry, and elementary French or German have been required. In civil engineering the same is true, except that the last requirement was not added until 1897–98. In law the New York law

student certificate (or its equivalent) was required down to 1898, when the requirement was made uniform with that of the department of arts and sciences.

The present requirements for admission are as follows:

For all courses: English, physiology, plane geometry, elementary algebra, two of the following: Grecian history, Roman history, English history, American history.

For arts and sciences, agriculture, and law: One of the following groups: (1) Greek and Latin; (2) Latin and advanced French or advanced German; (3) advanced French, advanced German, and advanced mathematics, or as an alternative to mathematics, one of the sciences, physics, chemistry, botany, geology, or zoology.

For architecture, civil engineering, or mechanical engineering: Solid geometry, advanced algebra, plane and spherical trigonometry, elementary French or German.

For veterinary science: Three of the following: (1) Elementary French; (2) elementary German; (3) elementary Latin; (4) advanced Latin; (5) Greek; (6) two years in physics, botany, geology, zoology, advanced French, advanced German.

For medicine, a medical student's certificate issued by the regents of the State of New York.

For forestry: Advanced French, advanced German, and advanced mathematics, with Latin as an alternative for French.

The following table shows the entrance requirements announced for each course in each of the thirty years:

Year.	All courses.	Arts.	Philosophy and Literature.	Letters, and Science and Letters.	Science.	Agriculture.	Architecture.	Civil Engineering.	Mechanical Engineering.	Law.
1868-69	Primary 1	Latin and Greek.	Latin							
1869-70	do	do	do							
1870-71	do	Latin, Greek, and Plane Geometry.	Latin and Plane Geometry.							
1871-72	do	do	do							
1872-73	Primary 2	do	do		(a)			Plane Geometry		
1873-74	do	do	do					do		
1874-75	do	do	do		Plane Geometry.		Plane Geometry	do	Plane Geometry	
1875-76	do	do	do		do		do	do	do	
1876-77	Primary 3	Latin, Greek, and Group A.	Latin and Group A.	Group A	Group A		(b)	(b)		
1877-78	do	do	do	do	do					
1878-79	do	do	do	do	do					
1879-80	do	do	do	do	do					
1880-81	do	do	do	do	do					
1881-82	do	Latin, Greek, and Latin and Greek History.	Latin, Group A, and Latin and Greek History.	do	do					
1882-83	do	do	do	do	do					
1883-84	do	do	do	do	do					
1884-85	do	do	do	do	do					
1885-86	do	do	do	do	do					
1886-87	do	do	do	do	do					
1887-88	do	do	do	do	do		Solid Geometry	Solid Geometry	Solid Geometry	Law-student certificate.
1888-89	do	do	do	Group B	Group B	Group B	do	do	do	Do.
1889-90	do	do	do	do	do	do	do	do	do	Do.
1890-91	do	do	do	do	do	do	Solid Geometry, and Elementary French or Elementary German.	Solid Geometry, and Elementary French or Elementary German.	Solid Geometry, and Elementary French or Elementary German.	Do.
1891-92	Primary 4	do	do	do	do	do	do	do	do	Do.
1892-93	do	do	do	do	do	do	do	do	do	Do.
1893-94	do	do	do	do	do	do	Add also Advanced Algebra and Trigonometry.	do	Add also Advanced Algebra and Trigonometry.	Do.

1894–95	....do	....do	....do	....do	....do	....do	....do	....do	....do	....do	Do.
1895–96	....do	....do	Latin, Greek and Latin History and Elementary French or German.		Group C	....do	....do	....do	....do		Do.
1896–97	Primary 5	Group D				....do	....do	....do	....do		Do.
1897–98	....do	....do				Group D	....do	Add also Advanced Algebra and Trigonometry.	....do		Group D.

a In natural history for several years hereafter there was an added requirement of plane geometry, plane trigonometry, elementary Latin; after 1881, elementary French, or elementary German, or advanced mathematics.

b Solid geometry and plane trigonometry appear, but disappear two years later.

EXPLANATIONS.

Primary 1.—English, geography, arithmetic, algebra to quadratics.
Primary 2.—Same, with algebra through quadratics.
Primary 3.—Same as 2, with plane geometry and physiology added.
Primary 4.—Same as 3, with American history added.
Primary 5.—English, geography, physiology, algebra, plane geometry, two of the following: Greek, Roman, English, American history.
Group A.—Elementary French or German or advanced mathematics (solid geometry, advanced algebra, plane trigonometry).
Group B.—Two of above.
Group C.—Two of following: Advanced French, advanced German, advanced mathematics.
Group D.—One of the following groups: (1) Greek and Latin; (2) Latin and advanced French or advanced German; (3) advanced French, advanced German, and advanced mathematics.

The following table shows the entrance requirements announced for each course in each of the thirty years:

Year.	All courses.	Arts.	Philosophy and Literature.	Letters, and Science and Letters.	Science.	Agriculture.	Architecture.	Civil Engineering.	Mechanical Engineering.	Law.
1868–69	Primary 1	Latin and Greek.	Latin							
1869–70	do	do	do							
1870–71	do	Latin, Greek, and Plane Geometry.	Latin and Plane Geometry.							
1871–72	do	do	do							
1872–73	Primary 2	do	do		(a)			Plane Geometry		
1873–74	do	do	do					do		
1874–75	do	do	do		Plane Geometry.		Plane Geometry	do	Plane Geometry	
1875–76	do	do	do		do		do	do	do	
1876–77	Primary 3	Latin, Greek, and Group A.	Latin and Group A.	Group A	Group A		(b)	(b)		
1877–78	do	do	do	do	do					
1878–79	do	do	do	do	do					
1879–80	do	do	do	do	do					
1880–81	do	do	do	do	do					
1881–82	do	Latin, Greek, and Latin and Greek History.	Latin, Group A, and Latin and Greek History.	do	do					
1882–83	do	do	do	do	do					
1883–84	do	do	do	do	do					
1884–85	do	do	do	do	do					
1885–86	do	do	do	do	do					
1886–87	do	do	do	do	do					
1887–88	do	do	do	do	do		Solid Geometry	Solid Geometry	Solid Geometry	Law-student certificate.
1888–89	do	do	do	Group B	Group B	Group B	do	do	do	Do.
1889–90	do	do	do	do	do	do	do	do	do	Do.
1890–91	do	do	do	do	do	do	Solid Geometry, and Elementary French or Elementary German.	Solid Geometry, and Elementary French or Elementary German.	Solid Geometry, and Elementary French or Elementary German.	Do.
1891–92	Primary 4	do	do	do	do	do	do	do	do	Do.
1892–93	do	do	do	do	do	do	do	do	do	Do.
1893–94	do	do	do	do	do	do	Add also Advanced Algebra and Trigonometry.	do	Add also Advanced Algebra and Trigonometry.	Do.

1894–95	do	do	do	do	do	do	do	do	do	do	Do.
1895–96	do	do	Latin, Greek and Latin History and Elementary French or German.		Group C	do	do	do	do	Do.
1896–97	Primary 5	Group D				do	do	do	do	Do.
1897–98	do	do				Group D	do	Add also Advanced Algebra and Trigonometry.	do	Group D.

a In natural history for several years hereafter there was an added requirement of plane geometry, plane trigonometry, elementary Latin; after 1881, elementary French, or elementary German, or advanced mathematics.
b Solid geometry and plane trigonometry appear, but disappear two years later.

EXPLANATIONS.

Primary 1.—English, geography, arithmetic, algebra to quadratics.
Primary 2.—Same, with algebra through quadratics.
Primary 3.—Same as 2, with plane geometry and physiology added.
Primary 4.—Same as 3, with American history added.
Primary 5.—English, geography, physiology, algebra, plane geometry, two of the following: Greek, Roman, English, American history.
Group A.—Elementary French or German or advanced mathematics (solid geometry, advanced algebra, plane trigonometry).
Group B.—Two of above.
Group C.—Two of following: Advanced French, advanced German, advanced mathematics.
Group D.—One of the following groups: (1) Greek and Latin; (2) Latin and advanced French or advanced German; (3) advanced French, advanced German, and advanced mathematics.

C. The Faculties.

The first organization of the faculties was, at least theoretically, into a general university faculty and into a number of special faculties corresponding to the "colleges" above described. It is stated in the first register that—

> The faculties of the colleges have, under the university faculty, the general supervision of the lectures and class exercises properly belonging to each; arrange special courses; are charged with the oversight of students pursuing special courses, and are intrusted with the keeping of such of the university museums and collections as illustrate their respective branches of study.

This is repeated down to and including the register for 1872–73. In 1873–74 the term "college" disappears, and with it the term "special faculties." The latter makes its reappearance, however, in 1874–75, and continues with some variations down to 1890–91. It seems, however, to express nothing more than a grouping according to departments of work. At most the "special faculty" was a committee for routine administration, and all matters requiring faculty action were referred to the one general faculty.

In 1887 the faculty of law was organized as an independent faculty, and from that date to 1896 there were two faculties, each quite independent of the other.

In 1889–90 appears for the first time the university senate, composed of the full professors of the general and law faculties and vested with the power of confirmation or rejection, subject to final action of the board of trustees, of nominations for positions in either of the two faculties. After a short and somewhat tempestuous career the academic senate disappears in 1893.

In 1896 there was a complete and radical reorganization of the departments and faculties. First, there was a return to the early nomenclature, and each technical or professional department was designated as a "college." Second, there was a return to the early division into a university faculty and a number of special faculties, the latter corresponding to the "colleges," and in addition including as one special faculty all the corps of instruction in the academic department or department of arts and sciences. Under this plan the university faculty, or general faculty, includes all professors, associate professors, and assistant professors, and deals with the graduate department, matters of general university policy, and matters affecting more than one special faculty. The special faculties include the faculty of arts and sciences, the faculty of the college of law, the faculty of the college of civil engineering, the faculty of the college of mechanical engineering, the faculty of the college of architecture, the faculty of the college of agriculture, the faculty of the medical college, the faculty of the New York State Veterinary College, and the faculty of the New York State College of Forestry. Each special faculty deals with the concerns of its own department or college, deter-

mines entrance requirements and courses of study, and exercises discipline over its own students. Its legislation is subject to revision by the university faculty "on all matters affecting general university policy."

In 1886–87 appears for the first time the dean of the general faculty. This office was continued down to 1896, when, upon the reorganization, a dean was appointed for the university faculty, for the faculty of arts and sciences, and a "director of the college and dean of the faculty" for each of the colleges. The school of law had been organized with a dean from its beginning in 1887. The deans have been as follows:

The old general faculty (to 1896): Charles Ashmead Schaeffer (1886–87); Henry Shaler Williams (1887–88); Horatio Stevens White (1888–1896).

The law school faculty: Douglas Boardman (1887–91); Francis Miles Finch (1891 —); associate dean, Harry Burns Hutchins (1892–1895).

Under the reorganization of 1896: University faculty, Horatio Stevens White; arts and sciences, Thomas Frederick Crane; agriculture, Isaac Phillips Roberts; architecture, Charles Babcock (1896–97), Alexander Bull Trowbridge (1897 —); civil engineering, Estévan Antonio Fuertes; mechanical engineering, Robert Henry Thurston; law, Francis Miles Finch; veterinary medicine, James Law; medicine, William M. Polk (1898 —); forestry, Bernhard E. Fernow (1898 —).

D. The Professors.

It is quite impracticable to do more than refer to the various professors who have conducted the educational work of the university. For convenience they will be mentioned in connection with the departments and colleges into which the university is now divided.

1. The academic department.

The academic department is now divided into numerous separate branches or groups. For the sake of simplicity and convenience these may be here grouped into a somewhat smaller number. Prof. T. F. Crane has been dean of the faculty of arts and science since 1896, and was, during the temporary absence of Dr. Schurman, the acting president of the university.

A. Languages and Literatures.

The classical languages were originally united at Cornell under the professorship of Albert S. Wheeler from 1868 to 1871. In the latter year a division was made upon the resignation of Professor Wheeler. Tracy Peck became professor of Latin and Isaac Flagg professor of Greek. In 1880 Professor Peck was succeeded by Prof. William Gardner Hale, and he in turn in 1892 by Prof. Charles E. Bennett. Professor Flagg was succeeded in 1888 by Prof. Benjamin I. Wheeler, who in 1886 had been called to the chair of comparative philology,

and who combined the two. G. P. Bristol is associate professor of Greek, and H. C. Elmer assistant professor of Latin. Alfred Emerson was associate professor of classical archæology from 1891 to 1898. An excellent museum of classical archæology has been provided through the generosity of Henry W. Sage. The work in Greek and Latin has always been of the highest order, and during the period of intercollegiate literary contests from 1874 to 1879 Cornell students distinguished themselves, especially in the contests in Greek and Latin. Since 1896 Nathaniel Schmidt has been professor of the Semitic languages and literatures. H. S. White (1876–1878), D. W. Brown (1878–79), and William R. Perkins (1879–1882) have served as assistant professors of Latin.

The modern foreign languages s[illegible]to have been divided from the outset into two chairs, that of R[illegible]ce languages and that of Germanic languages. [illegible]va[illegible]lown to 1881 by Prof. William Channing Russel, assis[illegible] P[illegible]F. Crane. J. M. Hart, W. M. Howland, F. L. O.[illegible]d[illegible] Stebbins were also assistants at different periods[illegible] Crane was given an independent profess[illegible]sh, and on the retirement of Professor F[illegible]ead[illegible]e Romance language department, in[illegible]now[illegible] Asst. Prof. E. W. Olmstead and sever[illegible]Courses. The[illegible]German language and literature was filled [illegible]m 1868 to 1[illegible]of. Willard Fiske. Upon his retirement W. T. Hewett, who l[illegible]been assistant professor since 1870, and H. S. White, who was assistant professor of Latin from 1876 to 1878 and of German since 1878, were made professors of German language and literature, and have since jointly administered the department. H. H. Boyeson was assistant professor from 1873 to 1876, and professor of German literature from 1876 to 1880. Others who have been connected with the department as assistants are G. F. Behringer (1869–70), J. M. Hart (1869–1873), B. P. McKoon (1870–1883).

The department of English was organized by Prof. Homer B. Sprague, who remained from 1868 to 1870, when he was succeeded by Prof. Hiram Corson. Both Professor Sprague and Professor Corson were entitled "professor of rhetoric and oratory," but the instruction by both was broader than the title, including English literature, and in the case of Professor Corson, Anglo-Saxon. In 1871 Charles C. Shackford was made professor of rhetoric and general literature, and Professor Corson gave his attention to English literature, including Anglo-Saxon. Upon the retirement of Professor Shackford as emeritus in 1886, Professor Corson again united the work in rhetoric and literature until in 1887 Brainerd G. Smith was elected associate professor of rhetoric and oratory, being succeeded in 1893 by Asst. Prof. D. C. Lee. From 1881 to 1883 William E. Lucas, who had previously been instructor, was assistant professor of rhetoric and composition. In 1890 James Morgan Hart became professor of rhetoric

and English philology. The work of the department is now threefold—English literature, in charge of Professor Corson; rhetoric and English philology, in charge of Professor Hart, and elocution and oratory, in charge of Assistant Professor Lee. O. F. Emerson was assistant professor of rhetoric and English philology from 1892–1896. In 1897 F. C. Prescott became assistant professor of rhetoric. In the same year Miss Louise Sheffield Brownell, warden of Sage College, became also a lecturer in English literature. In English literature Professor Corson's work has been, since his coming in 1870 to the present day, an inspiration and delight to great bodies of students.

B. HISTORY AND POLITICAL SCIENCE.

History and political science are united into one department, now known as the President White School of History and Political Science. The union was formally made in 1881, and the above title was adopted in 1887. The school has no permanent head, however, and the different chairs combined under the title are practically independent.

From 1868 to 1885 President White was professor of modern European history. President Adams succeeded to the same title in 1885, but resigned the chair in 1889. In 1890 Herbert Tuttle was transferred from the chair of politics to that of modern European history, and on his death in 1894 he was succeeded by Prof. H. Morse Stephens. From 1868 to 1881 William Channing Russel was associate professor of history, giving instruction mainly in Roman, mediæval, and American history. From 1868 to 1872 Goldwin Smith was professor of English history, and has since been a frequent lecturer on that subject. In recognition of his devotion and generosity to the university the trustees conferred on him, in June, 1894, the honorary appointment of professor of English history, emeritus. In 1881 a chair of American history was established, to which Prof. Moses Coit Tyler was elected, a choice which has been more than justified by the unflagging interest manifested by students in the work of his department. In 1888 George L. Burr was made instructor in mediæval history, and was rapidly promoted through all the grades to professor of ancient and mediæval history. The department of history has now, therefore, three chairs—ancient and mediæval history, filled by Professor Burr; modern European history, filled by Professor Stephens, and American history, filled by Professor Tyler. The department has always been peculiarly fortunate in its choice of professors. The brilliant work of Professors White and Smith gave it an impetus at the outset, which it has never lost to the present day.

In political science the instruction by resident professors was given mainly down to 1881 through the courses in history, supplemented by brief courses in political economy by Prof. W. D. Wilson and Asst. Prof. Ziba Potter. In 1881 Herbert Tuttle was appointed lecturer on international law, and in 1883 was made associate professor, and in 1887

professor of politics, his exact title varying somewhat from year to year. Professor Tuttle's work was of a brilliant order, but his tastes lay more decidedly in the field of modern European history, to which he was transferred in 1891. He was succeeded in that year by Prof. Jeremiah W. Jenks. In 1883 Henry Carter Adams was elected associate professor of political economy, dividing his time between Michigan University and Cornell. After four years of service, during which time he made the study of political economy an inspiration to great numbers of students, he retired in order to give all his time to Michigan. He was succeeded in 1888 by Prof. E. Benjamin Andrews, and he in 1890 by Prof. J. Lawrence Laughlin, with whom A. C. Miller was associated. Both the latter resigned in 1892, and the department of political science was united under the head professorship of Professor Jenks, with E. A. Ross, W. F. Willcox, and C. H. Hull as assistants. Professor Ross resigned after one year and the work has since been carried on by Professors Jenks, Willcox, and Hull, with one or more instructors. The department now falls into three classes—that of politics, in charge of Professor Jenks; social science and statistics, in charge of Associate Professor Willcox, and political economy and finance in charge of Assistant Professor Hull.

C. PHILOSOPHY.

Philosophy was from 1868 to 1886 in charge of William Dexter Wilson, the well-beloved and venerated registrar of the university. During this period he lectured on the history of philosophy, the philosophy of history, psychology, logic, and kindred topics. He also gave some instruction in political science, having courses in political economy and American law. In 1886 he was made professor emeritus and retired from active service. A professorship of Christian ethics and mental philosophy was created by the generosity of Henry W. Sage in 1885, in memory of his wife, Susan E. Linn Sage, and to this in 1886 Jacob Gould Schurman was called. In 1890 Mr. Sage endowed a department of philosophy and steps were taken to equip and develop it. To the department was given the name of Susan E. Linn Sage School of Philosophy. Dr. Schurman was made dean of the school and professor of mental and moral philosophy, which chair he resigned in 1896. Charles Mellen Tyler succeeded Dr. Schurman in 1891 as professor of Christian ethics, to which was added the further title of the history and philosophy of religion. In addition several professorships in special branches of philosophy were created. Frank Angell was assistant professor of psychology during 1891–92; William A. Hammond was made assistant professor of ancient and mediæval philosophy in 1892; James E. Creighton was assistant professor of modern philosophy from 1892 to 1895, and in the latter year became professor of logic and metaphysics; Edward B. Titchenor was assistant professor of psychology from 1892 to 1895 and has been professor of

CORNELL UNIVERSITY—FRANKLIN HALL, PHYSICS.

psychology since the latter date; James Seth was professor of moral philosophy from 1896 to 1899. He is to be succeeded next year by Prof. E. B. McGilivray. The chair of pedagogy was filled from 1886 to 1898 by Prof. Samuel Gardner Williams, who, upon his resignation last June, was made professor emeritus. He is succeeded by Prof. Charles De Garmo. The school publishes a periodical known as the Philosophical Review.

D. SCIENCES.

The scientific branches of the academic department may be for convenience grouped under the heads of mathematics, physics, chemistry, geology, botany, entomology and invertebrate zoology, and physiology and vertebrate zoology.

The department of mathematics was first organized by Prof. Evan Wilhelm Evans, who remained at its head until his death in 1874. During this time the following served as assistant professors: Ziba H. Potter (1868–1882), William E. Arnold (1869–1876), Henry Turner Eddy (1869–1873), Lieut. William J. Hamilton (1869–70), Lucien Augustus Wait (1870–1877), James Edward Oliver (1871–1873), William Edward Byerly (1873–1876). From 1874 to his death in 1895, Professor Oliver was head professor of the department, but since 1891 shared the administrative work with Professor Wait, who became an associate professor in 1877 and professor in 1891. George William Jones was elected assistant professor in 1877, associate professor in 1893, and professor in 1895. James McMahon has been an assistant professor since 1890, and John H. Tanner since 1894. There have been, during the thirty years, a very considerable number of teachers in the department of the rank of instructors. The department necessarily comes into relations with a large number of students and has always maintained a rigid standard.

The department of physics was organized by Prof. Eli Whitney Blake, who served from 1868 to 1870, being succeeded by Prof. John Jackson Brown, who served for one year, and was in turn succeeded by Prof. F. E. Loomis, who also served for one year. The department then passed under the charge of Prof. William A. Anthony, who served from 1872 to 1887, and to whose ability and zeal the department very largely owes its great success. On Professor Anthony's retirement in 1887 he was succeeded by Prof. E. L. Nichols, who still remains in charge. The staff now consists of Professor Nichols, Asst. Prof. G. S. Moler (1880—), Ernest Merritt (1892—), and Frederick Bedell (1893—), besides several instructors and assistants. In 1881 a separate building was erected for physics and chemistry, which, since the erection of a special building for chemistry, has passed wholly under the control of the department of physics. To this department is due the establishment of a course in electrical engineering, which is now regarded as a department in the Sibley College of Mechanical

Engineering. The department publishes a review known as the Physical Review, under the editorship of Professors Nichols and Merritt.

The department of chemistry was organized jointly by Profs. G. C. Caldwell and J. M. Crafts, the first being professor of agricultural chemistry and the second of general chemistry. Professor Crafts retired in 1870. Professor Caldwell still remains in the service, being the senior professor of the university, and since 1892 has been professor of general chemistry and of agricultural chemistry in general charge of the department. Prof. Charles A. Schaeffer was professor of analytical chemistry and mineralogy, and later of general chemistry also, from 1869 to 1887. Others who have been connected with the department are Prof. C. H. Wing (1870–1873), Prof. A. A. Breneman (1875–1882), Prof. S. B. Newbury (1882–1892). The staff now consists of Professor Caldwell, Associate Prof. L. M. Dennis (1891—), and Asst. Prof. W. R. Orndorff (1890—), J. E. Trevor (1892—), Wilder D. Bancroft (1895—), besides several instructors and assistants. A building known as Morse Hall was erected for the department in 1890, and has been enlarged during the present year.

In geology the first professor was Charles Frederick Hartt, who served from 1868 to 1878, and whose brilliant work did much to place the department upon a sound basis. Professor Hartt died while upon a scientific expedition to Brazil in 1878. Assistant Prof. T. B. Comstock served from 1875 to 1879, during most of which time Professor Hartt was absent in Brazil. From 1879 S. G. Williams was professor of general and economic geology down to 1886, and H. S. Williams (1879) was assistant and afterwards full professor of paleontology down to the same year, when he became professor of geology and paleontology, and so remained until his retirement in 1892. J. F. Kemp was assistant professor from 1888 to 1891. The department, as at present organized, consists of R. S. Tarr (1892), professor of dynamic geology and physical geography; G. D. Harris (1894), assistant professor of paleontology, and A. C. Gill (1894), assistant professor of mineralogy and petrography, besides instructors and assistants.

The department of botany was organized by Prof. A. N. Prentiss in 1868, who continued in charge of the department down to 1895. During this period W. R. Dudley was assistant professor from 1876 to 1892, when he was succeeded by Associate Prof. G. F. Atkinson. W. R. Lazenby was assistant professor of horticulture from 1879 to 1881. Since 1888 L. H. Bailey, jr., has been professor of general and experimental horticulture. Professor Atkinson became associate professor in 1893 and professor in 1896. Willard W. Rowlee has been assistant professor since 1893. The department has been well housed and supplied with laboratories and greenhouses through the generosity of Henry W. Sage. A catalogue of the flowering plants of Ithaca and vicinity was published in 1886 by Professor Dudley and marks a portion of the careful and scholarly work of the author.

CORNELL UNIVERSITY—MORSE HALL (CHEMISTRY).

The department of entomology and general invertebrate zoology was at first a part of the department of general zoology. John Henry Comstock was appointed instructor in the subject in 1873 and was made assistant professor in 1876 and full professor in 1882. During the period from 1879 to 1881, when Professor Comstock was engaged in Government work at Washington, the work was carried on by Asst. Prof. W. S. Barnard. The work of Professor Comstock, both at Cornell and at Washington, has been of the very highest order and has been of incalculable service to American farmers and fruit growers. An insectary, the first of its kind, so far as is known, anywhere in the world, was erected and equipped in 1888 and has been copied at various other experiment stations throughout the country.

The department of physiology and vertebrate zoology was organized by Prof. Burt G. Wilder in 1868. Professor Wilder remains in charge of the department down to the present, having been assisted since 1878 by S. H. Gage, who was appointed instructor in that year, assistant professor in 1881, associate professor in 1889, and professor in 1895. Professor Gage's title is now professor of microscopy, histology, and embryology. In addition to the work in physiology, anatomy, and kindred subjects, intended for general students in science, the department offered until the establishment of the medical college a special course of two years to students preparing for the study of medicine. The equipment of the department in the matter of specimens is excellent, owing to the unwearied zeal of the professors in charge. The museum is specially rich in human brains, Professor Wilder having made the brain a special study for many years.

2. TECHNICAL AND PROFESSIONAL DEPARTMENTS.

The technical and professional departments consist of the college of agriculture, the Sibley College of Mechanical Engineering and the Mechanic Arts, the college of civil engineering, the college of architecture, the college of law, the medical college, the New York State Veterinary College, and the New York State College of Forestry.

The college of agriculture was organized by Prof. Lewis Spaulding in 1869, who remained but one year. He was succeeded by Prof. Henry McCandless, who was in charge from 1871 to 1873. During this period lectures were delivered by John Stanton Gould. Mr. Gould's lectures were probably the only instruction received by agricultural students in scientific agriculture. Both Professor Spaulding and Professor McCandless seem to have been rather practical farmers than professors of agriculture. A new era dates from the appointment of Prof. Isaac P. Roberts as professor of agriculture in 1873. Professor Roberts has been in charge of the department from that time to the present, and its growth during this period has been steady and gratifying. An experiment station was established in 1879, which became a State experiment station in 1887. In 1890 the department

became formally the college of agriculture, and Professor Roberts its director. The college is strengthened by the allied departments of horticulture, under the direction of Professor Bailey, and of veterinary science, under the direction of Prof. James Law, who has been in service in that department since 1868. The regular agricultural course is four years, but a special course of two years is offered to students who are not candidates for a degree, and a short winter course is given each winter to meet the needs of those who can not spend more than one or two terms at the university. Instruction is given in animal industry and dairy husbandry, which is under the charge of Asst. Prof. H. H. Wing. The departments of chemistry, botany, entomology, etc., are allied to the department of agriculture in certain phases of its work and help to make up, with the department of agriculture, the experiment station.

The Sibley College of Mechanical Engineering and the Mechanic Arts.—The department of mechanics was organized at the beginning of the university by Prof. John Morris. Professor Morris is still at the head of the department, which is now incorporated into the larger organization known as Sibley College of Mechanical Engineering and the Mechanic Arts. The Sibley College was reorganized in 1885, and Prof. Robert H. Thurston elected director. Its growth since that time has been remarkable, the number of students enrolled in its various departments in 1891 being 463. As now organized it includes six departments—mechanical engineering, experimental engineering, electrical engineering, mechanic arts, industrial drawing and art, and machine design—besides a graduate school of marine engineering and naval architecture, and a graduate school of railway mechanical engineering.

The present staff consists of the director, Professor Thurston, in charge of mechanical engineering; Professor Morris, in charge of practical mechanics and machine construction; Prof. R. L. Carpenter (1890), in experimental engineering; Prof. H. J. Ryan (1889), in electrical engineering; Prof. W. F. Durand (1891), in marine engineering, and Asst. Prof. E. R. McDermott, in naval architecture; Prof. J. H. Barr (1891) and Asst. Prof. D. S. Kimball (1898), in machine design; Asst. Prof. E. C. Cleaves (1873), in free-hand and mechanical drawing; and Asst. Prof. H. W. Hibbard (1898), in mechanical engineering of railways; besides a large number of instructors and assistants.

Others who have been connected with the department are Prof. J. E. Sweet (1878–79), Prof. S. W. Powel (1879–80), Prof. J. B. Webb (1880–1885), Asst. Profs. E. L. Gardiner (1879–80), W. C. Kerr (1880–1882), W. M. McFarland (1883–1885), F. H. Bailey (1885–1888), A. W. Smith (1887–1892), E. P. Roberts (1888–89), A. B. Canaga (1888–1891).

The college owes its material resources in large part to the generosity of Hiram Sibley, in whose honor it is named, and who, from

1870 to his death, in 1887, gave over $150,000 toward its equipment and endowment. His son, Hiram W. Sibley, has since added about $70,000 for the same purposes.

The department, down to 1898, had conferred 912 first degrees and 81 second degrees, a total of first degrees in excess of that conferred by any other college of the university or in any one of the general courses in the academic department.[1] The facilities of the college have been overtaxed during recent years, and it has been found necessary to impose increased requirements for admission in order to keep the number of students at a point where they could receive proper opportunities for work. Altogether the success of this department has justified the ample endowment conferred by the National Government for instruction in three main branches, of which this is one.

The college of civil engineering.—In civil engineering the first professor was William Charles Cleveland, upon whose death, in 1873, Prof. Estévan A. Fuertes took charge of the department. Under his efficient and devoted management it has had a history of marked success. Its graduates, down to 1898, number about 300, and have taken front rank in engineering enterprises and as teachers in similar institutions. Charles L. Crandall has been assistant professor, associate professor, and later professor in the department since 1875; Irving P. Church since 1876. The latter was made professor of applied mechanics in 1892. Robert Herman was assistant professor in 1884; C. D. Marks from 1884 to 1890; C. B. Wing in 1891. H. S. Jacoby was appointed assistant professor in 1890, associate professor in 1894, and professor in 1898. Gardner Williams was elected professor of experimental hydraulics in 1898. The staff now consists of Professors Fuertes, Church, Crandall, Jacoby, and Williams, Asst. Prof. H. W. Ogden, and a number of instructors and assistants. The department was named the college of civil engineering in 1896, and Professor Fuertes its director. The college occupies the larger portion of Lincoln Hall, which was erected for the joint accommodation of it and the department of architecture. In addition to the equipment at this building there has just been completed a hydraulic laboratory at the foot of Triphammer Falls in Fall Creek.

The college of architecture.—The department of architecture was united with that of civil engineering down to 1871, when the Rev. Charles Babcock was elected professor of architecture and in 1896 director of the college. Charles Francis Osborne was made instructor in 1880, assistant professor in 1881, and associate professor in 1892. He resigned in 1897. C. A. Martin was made assistant professor in 1895. Professor Babcock resigned in 1897 and became professor emeritus. In the same year Alexander Buel Trowbridge was elected professor in charge of the college and John V. Van Pelt assist-

[1] Science comes next with 749 first degrees, but of these 223 were in science and letters; law follows with 608 and arts with 476.

ant professor. In 1898 Olaf M. Brauner was elected assistant professor of drawing and molding. The department met with the special encouragement of President White, who gave it a valuable library, besides additional sums of money for the purchase of books. The department or college has conferred 174 first degrees.

The College of Law.—The law school was first organized in 1887. The first faculty consisted of Douglass Boardman, dean, and Profs. H. B. Hutchins, F. M. Burdick, and C. A. Collin. Professor Burdick retired in 1891, was succeeded by Prof. Charles E. Hughes, who retired in 1893, and was succeeded by Prof. E. W. Huffcut. William A. Finch was elected assistant professor in 1891, associate professor in 1892, and professor in 1895. Professors Hutchins and Collin retired in 1895 and were succeeded by Profs. Cuthbert W. Pound and Henry W. Hardon. The latter retired in 1896 and was succeeded by Prof. E. H. Woodruff. Prof. Henry S. Redfield was elected to the faculty in 1898. Upon the death of Judge Boardman in 1891 he was succeeded in the office of dean by Judge Francis M. Finch, an associate justice of the court of appeals. Down to Judge Finch's retirement from the bench, at the end of 1895, the administration of the school was in the efficient hands of Professor Hutchins, first as secretary and later as associate dean. In 1896 the school was rechristened a college, and Judge Finch became director. A building was erected at a cost of over $100,000 for the special accommodation of the school, and was dedicated in 1893 as Boardman Hall. At the same time Mrs. Boardman and Mrs. George R. Williams, the widow and daughter of Judge Boardman, presented the school with the Moak library, a gift which gave the school completely adequate library equipment. The course up to 1897 was a two years' course, but for the class entering in that year and thereafter it was extended to three years. The school has conferred 608 first degrees and 60 second degrees.

The New York State Veterinary College was established at Cornell by the legislature of 1894. The State erected and equipped a building at a cost of $150,000, and has since appropriated to its maintenance $25,000 a year. From 1868 to 1896 James Law was professor of veterinary medicine and surgery in the university. With the organization of the State college he was elected director. The rest of the staff, all elected in 1896, are Profs. V. A. Moore, W. L. Williams, and Asst. Profs. P. A. Fish and G. S. Hopkins. Prof. S. H. Gage, since 1877 connected with the department of physiology and zoology, is also upon the staff of the veterinary college.

The Medical College opened in the fall of 1898, and is therefore not within the period covered by this sketch. The college is located in New York, and is due to the generosity of Col. Oliver H. Payne, who has undertaken to furnish means for its establishment and maintenance. It is now located in a building in the grounds of the Bellevue Hospital, but a building for its special accommodation is being erected

SIBLEY COLLEGE—MECHANICAL AND ELECTRICAL ENGINEERING AND MECHANIC ARTS.

on First avenue, between Twenty-seventh and Twenty-eighth streets. The first two years of the course are duplicated at the university, so that a student may take these years at either place. There are already registered in the college 274 students. The faculty numbers at the New York college 25 professors, together with a large staff of instructors and assistants.

The New York State College of Forestry, like the medical college, does not belong to the era covered in this sketch. It was established under authority of the legislature in 1898, and has for its object education and instruction in the principles and practice of scientific forestry. The act makes provision for the purchase of a demonstration area in the Adirondacks of 30,000 acres, to be the property of the university for thirty years, and then to revert to the State. This area has already been secured, and the college has entered upon its work under the direction of Prof. B. E. Fernow, assisted by F. Roth.

3. Auxiliary Departments.

Three departments of the university may be regarded as auxiliary to all of the others—namely, the department of military science, of physical culture, and of the library.

The department of military science is made necessary by the terms of the land-grant act. The department was organized in 1868 by Maj. J. H. Whittlesey, who remained in charge until 1870, being assisted during a portion of the time by Maj. W. E. Arnold. The latter was in full charge from 1870 to 1873. Since that date the commandants have been as follows: Maj. J. W. MacMurray (1873–1875), Maj. W. P. Van Ness (1875–1877), Capt. J. B. Burbank (1877–1883), Capt. W. S. Schuyler (1883–1886), Lieut. W. P. Van Ness (1886–1889), Capt. H. E. Tutherly (1889–1892), Lieut. George Bell (1892–1896). Capt. Walter S. Schuyler was again assigned to the post in 1896, but on the outbreak of the recent war returned to active service as colonel of volunteers. During the early days of the university all students were required to wear a uniform, take part in daily military drill, and observe in general the requirements of the camp as to hours and duties. This rigid military discipline did not continue long, however, and the uniform soon disappeared except at the hours for military drill. At present all members of the freshman and sophomore classes are required to drill three hours a week during the fall and spring terms unless excused for special reasons, such as that they are aliens or conscientiously opposed to military exercises on religious grounds, or are laboring students or physically unfitted for such duties. Lectures are also given to seniors during the winter term on military science. The provisions of the land-grant act have thus been faithfully observed by the university, and few students are graduated who have not had at least two years of military drill.

The department of physical culture was one of those recommended

by President White in his plan of organization. It was his idea that the university should provide a well-equipped gymnasium with a competent instructor, together with grounds for out-of-door sports, and that regular and systematic physical exercises should be required of all students. It was many years, however, before all of these ends were accomplished. A temporary gymnasium supplied the needs of students until 1883, when the present gymnasium and armory hall was erected. In the same year Edward Hitchcock, jr., was elected acting professor of physical culture, and has since been professor of physical culture and director of the gymnasium. Physical exercise is required during the winter term of all members of the freshman class. Lectures upon hygiene are also given each year in the fall term to members of the entering class, and all students upon entering the university are required to submit to a physical examination in order that the kind and extent of the physical exercise may be prescribed. Similar provisions are made for women students in the gymnasium connected with Sage College. By the generosity of Mr. J. J. Hagerman and Mr. W. H. Sage ample athletic grounds, known as Percy Field, have been provided for out-of-door sports. A commodious clubhouse has been erected upon these grounds, provided with dressing rooms and bathrooms, for the use of students taking part in athletic exercises.

The library was organized by Prof. Willard Fiske in 1868, and continued in his charge until his resignation in 1883, since which time it has been administered by George W. Harris, who had been an assistant to Professor Fiske since 1873. Andrew C. White has been an assistant librarian since 1889, and Willard H. Austin since 1892. George L. Burr, professor of mediæval history, has been since 1890 in special charge of the President White library, for which a special room in the library building is reserved. The nucleus of the library consisted of the Anthon collection of classical literature and philology, the Bopp collection in philology and oriental literature, the Ezra Cornell collection in agriculture, and the collection of modern scientific works purchased by the university; in all, something like 15,000 volumes. To this has been added the Goldwin Smith library of historical works, publications of the British patent office, the White architectural library, the Kelley mathematical library, the Sparks library of American history, the May collection relating to slavery, the Schuyler collection of folklore and Russian history, the Rhaeto-Romanic collection, the President White historical library, the Zarncke library of Germanic philology and literature, the Dante collection, the Spinoza collection, various other similar collections, and the yearly purchases of volumes and sets by the university. The law library is made up mainly of the Merritt King collection and the N. C. Moak collection. At the end of its first thirty years the University library contained 183,804 volumes and 35,000 pamphlets, and the law library

THE PRESIDENT WHITE LIBRARY OF HISTORY AND POLITICAL SCIENCE.

about 26,504 volumes. These libraries have been largely gifts of generous donors, the chief of whom are President White, Mrs. Boardman and Mrs. Williams, Willard Fiske, Goldwin Smith, William Kelley, Eugene Schuyler, and William H. Sage; ex-Governor Flower is the donor of the Flower veterinary library. The library owes its building and its permanent endowment to the generosity of Henry W. Sage, who erected the building at a cost of over a quarter of a million of dollars, and provided the library with a permanent endowment of $300,000. The library is managed by a body known as the library council, consisting of the president of the university, the librarian, a member of the board of trustees, and four members of the university faculty. The law library is administered by the law faculty, and is in charge of a librarian. Since 1893 the librarian has been A. H. R. Fraser.

A summer school was first organized in 1892, and courses were given in botany, chemistry, mathematics, philosophy, physics, English, French, German, drawing, and physical training. It was, however, not officially a part of the university system, but was conducted by professors as a voluntary undertaking. In subsequent years the courses were increased by Greek, Latin, history, political science, law, and some other subjects. It continued upon this basis down to and including the summer of 1898. By recent action of the trustees a summer session has been added as a part of the general university scheme, and hereafter such courses will be given as are specially fitted for the needs of teachers. Under this plan the summer session is officially a six weeks' term of the academic year, and all professors are instructors in and after 1899 are regularly appointed and paid by the university.

VII.

THE STUDENTS OF THE UNIVERSITY.

A. The Number of Students.

The number of students actually matriculated upon the books of the university during its first thirty years (excluding those in the summer school and in the winter school in agriculture) was 10,759. Of these, 3,599 were enrolled during the seventeen years of President White's administration, 3,252 during the seven years of President Adams's administration, and the balance during the first six years of President Schurman's administration. The largest number of matriculates in any one year down to 1887–88 was in the first year of the university. Four hundred and fourteen students presented themselves and were accepted during the opening year and 457 during the twentieth year. There has been a steady increase since that date, and in the thirtieth year there were 657 matriculates. The smallest number in any one year was in 1880–81, when only 125 matriculated.

The number of first degrees conferred down to June, 1898, was 4,235. The number of advanced degrees was 520, of which 129 were doctors' degrees. Of the first degrees conferred, 476 were in arts, 52 in literature, and 418 in philosophy, making 946 in courses requiring Latin or Latin and Greek for admission and graduation. In letters 259 first degrees were conferred, in science and letters (degree B. S.) 223, and in science 539 (of which 8 were in engineering). This makes a total of 1,013 degrees in courses requiring neither Latin nor Greek. The total number of degrees in the department of arts and sciences was therefore 1,959, of which 946 were in classical courses, 482 in modern language courses, and 531 in scientific courses. The first degrees conferred in the technical and professional courses were as follows: Agriculture, 103; architecture, 174; mechanical engineering, 918 (of which 461 were in electrical engineering); civil engineering, 459; veterinary science, 11; pharmacy, 3; law, 608; total, 2,276.

The matriculations, attendance, and degrees for each year of the university are shown by the following table:

Year.	Matriculates.	Attendance.	First degrees.	Advanced degrees.
1868–69	414	414	16	----------
1869–70	313	563	23	1
1870–71	280	609	41	----------
1871–72	208	597	68	2
1872–73	188	539	95	3
1873–74	203	509	65	8
1874–75	200	532	50	3
1875–76	219	542	62	10
1876–77	232	561	71	8
1877–78	180	529	67	3
1878–79	160	505	67	4
1879–80	149	463	78	4
1880–81	125	399	82	3
1881–82	135	384	64	3
1882–83	153	406	65	6
1883–84	209	461	61	4
1884–85	251	575	61	10
1885–86	273	649	82	13
1886–87	387	829	92	4
1887–88	457	1,022	137	12
1888–89	529	1,229	158	9
1889–90	505	1,329	242	32
1890–91	496	1,390	229	26
1891–92	605	1,538	282	33
1892–93	658	1,700	312	46
1893–94	684	1,801	272	76
1894–95	516	1,689	312	52
1895–96	593	1,702	327	52
1896–97	680	1,808	387	44
1897–98	657	1,835	375	49

The decrease in attendance from 1877 to 1881 has been attributed to various causes. Probably a combination of causes contributed to the result. The university was at that time in sore financial straits and little or nothing could be done in the way of enlarging the facilities and equipment of existing departments, or of creating new ones. This was also the period of President White's absence as minister of the United States at Berlin. With the beginning of the academic year 1881–82 the number of new students, and consequently the aggregate attendance, steadily increased. It was at about this time that the department of history and political science was practically created

and new professors were called to take charge of it. A little later the Sibley College of Mechanical Engineering was reorganized and strengthened and the increase in attendance there was very marked.

Attendance has always been affected also by the requirements for admission. During the early years of the university these were not very exacting, except in the courses of arts, literature, and philosophy. At various subsequent times the requirements for admission to the other general courses and to the technical courses have been raised. At present the requirements for admission to all the courses are about equally exacting in the amount of time required for preparation. Altogether it may fairly be said that the entrance requirements are now as high, measured by the amount of time required for preparation, as in any of the leading universities where the requirements are based mainly on Latin, Greek, and mathematics.

B. The Admission of Women.

Both Mr. Cornell and Mr. White had expressed the earnest wish in their addresses at the inaugural ceremonies that the university might speedily offer every advantage necessary for the higher education of young women equally with young men. "Speaking entirely for myself," said the latter, "I would say that I am perfectly willing to undertake the experiment as soon as it shall be possible to do so."

The possibility came sooner than he had ventured to hope. Mr. Henry W. Sage, upon the evening of the inaugural day, went quietly to President White and said: "When you are ready to carry out the idea of educating young women as thoroughly as young men, I will provide the endowment to enable you to do so."[1] Mr. Sage's purpose strengthened with the growth of the university, and shortly after, all other difficulties being then practically removed, he renewed his offer. A committee, of which President White was chairman, made an exhaustive study of all questions relating to coeducation, visited the leading institutions in which it had been tried, corresponded with eminent educators, and, in a report which reviews at length the whole problem, recommended the acceptance of the offer.[2] That offer was of an endowment of $250,000 upon the simple condition that "instruction shall be afforded to young women, by the Cornell University, as broad and thorough as that now afforded to young men."[3] In April, 1872, the offer was formally accepted by the trustees, and women were admitted to all the privileges of the university.

Probably this action by the trustees conferred no privileges upon women which they might not already have claimed under the charter; but the noble gift of Mr. Sage made it possible to offer to such as

[1] Proceedings at the laying of the corner stone of the Sage College (Ithaca, 1873). Remarks of President White, p. 6.

[2] Ibid, pp. 69–134.

[3] Ibid, p. 130.

should come the comforts and conveniences which, however dispensable in the case of men, were absolutely necessary for the care of any considerable number of young women. The Sage College is simply a home for women students, and in no sense an "annex." The women go into all classes with the men, pursue the same studies, hear the same lectures, work in the same laboratories. Mr. Sage simply provided them with a home where, under the care and advice of a lady principal, they are freed from the vexations and embarrassments of the ordinary boarding house.

This fine building was erected and furnished by Mr. Sage at a cost of $150,000, and received from him for its care and management $100,000 more. It was opened for the reception of the women students in the fall of 1875.

Eighteen young women applied for entrance to the university the same year (1872–73) that the trustees passed the formal resolution for their admission. From that time the number has steadily increased. In 1872–73 the proportion of women students was 1 in 40; in 1882–83 it was 1 in 8; in 1892–93 it was a little over 1 in 8. The total number in attendance in 1892–93 was 221.

In the report of President Adams for 1890–91 occurs the following passage:

> In former reports I have frequently called attention to the general good standing in their classes of the young women in the university. It is gratifying to know that the average proficiency of this class of students continues to be highly creditable. Indeed, if we were to judge of the comparative rank of the young women from the number of those who are unable to pass the examinations, we should be obliged to infer that their proficiency was considerably greater than that of the young men. Of those dropped from the university or from one class to another for deficiencies in scholarship, the proportion is far less than the proportion of the class as a whole. For obvious reasons this is not a correct means of comparison; but when every modifying circumstance is taken into consideration, we are forced to conclude that the average standing of the classes is made somewhat higher by the presence of women. (Pp. 22–23.)

In the report of President Schurman for 1897–98 is the following:

> Coeducation is so firmly established and so thoroughly accepted at Cornell University, it is so much a fundamental idea of the institution, that any reasoning in favor of the principle or indication of it drawn from experience could not but seem a wasteful and ridiculous excess of words. There is no call even to discuss the workings of the system, as the presence of women at Cornell on equal terms with men has not created any specific problems for the authorities of the university.

C. Provisions for the Accommodation of Students.

In his report on organization, President White recommended that the university make no provisions for dormitories other than rooms that could be spared for that purpose in the regular university buildings. This policy has been continued down to the present time save in the case of Sage College, which was erected by private funds for the accommodation of women students. Cascadilla Place was from the

first used mainly for housing professors and students, and is still put to the same use. No rooms in any other building are now available for this purpose. The great body of students are scattered throughout the city, or find quarters in the chapter houses erected by the various fraternities. The large increase in numbers during the past few years has given rise to some discomfort, but on the whole the demand for suitable rooms has been rapidly supplied by private enterprise, and the university still adheres in practice to its original decision.

During recent years, however, there has been decidedly a stronger demand on the part of the students for dormitory accommodations and a marked desire on the part of university authorities to comply with the demand as soon as practicable. At present there are no funds available for this purpose, and it is doubtful whether there will be in the near future. It is hoped, however, that private generosity will come to the aid of the university in this matter, and that suitable dormitories will be erected on the university grounds, similar to those at many of the other leading Eastern universities. The cost of living in Ithaca has increased in recent years, owing to the increase in the number of students, and it is believed that with dormitories and commons students can live more cheaply and more comfortably than they now do in private houses.[1]

Reference has been made to the erection of chapter houses by college fraternities. These have, to a considerable extent, supplied the place of dormitories. These fraternities, owing to the increasing number of their graduates, are able to provide the necessary funds for the erection and maintenance of the house. Some of these have been built on private grounds and some on the university campus. They are in general beautiful and commodious structures, accommodating from twelve to twenty men. It is the policy of the university to encourage the building of these houses under proper restrictions, and to this end it has granted sites to those fraternities that desired to build on the university domain.

The Sage College for women has, until recent years, been ample for the accommodation of most of the women students. It became, in later years, overcrowded, and an addition was made to it in 1895. The college is simply a home for women, under the charge of a lady principal, and affords the necessary comforts and conveniences for women residing at the university.

Reference has already been made to the provisions for the physical culture of students, both in the university gymnasium for men and in the Sage gymnasium for women.

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[1] In his report for 1896–97, President Schurman gives the results of an investigation into the prices actually paid by students for board and lodging. His results are thus stated: Forty per cent of the students pay $1.50 or less per week for lodging, and 35 per cent pay from $1.51 to $2.50. For board, 50 per cent pay $3 a week or less, and 40 per cent pay from $3 to $4.

D. Self Support by Students.

It had been a favorite idea with Mr. Cornell from the first to provide for the self-support of poor students. In pursuance of this idea he published in the New York Tribune a letter to the effect that young men could support themselves at the university by their own labor while carrying on their studies. He argued that if one man could support himself and a wife on the labor of a day, another man could support himself alone on the labor of half a day. In addition to his theory he had the demonstration of his own experience in which he had acquired a fair business education during the intervals of severe toil. On these premises he based the not illogical conclusion that, given a fair opportunity such as he purposed that the university should provide, any energetic young man could gain a college education and support himself at the same time. In his address at the inauguration proceedings he said:

> I believe that we have made the beginning of an institution which will prove highly beneficial to the poor young men and the poor young women of our country. This is one thing which we have not finished, but in the course of time we hope to reach such a state of perfection as will enable any one by honest efforts and earnest labor to secure a thorough practical, scientific, or classical education.

Mr. Cornell's idea was adopted, though with some modifications, by his colleagues. In his "report on organization" Mr. White argued that previous experiment had not, as claimed, shown the futility of the plan and that as Cornell would have in this respect advantages possessed by none of its predecessors, it ought at least to try the experiment. In his inaugural address he approaches the subject with more caution and expresses a doubt whether unskilled laborers could do much toward their own support while pursuing a college course. Nevertheless he pledges the university to a fair trial of the experiment and an honest effort to solve the problem, and declares that "no class of students shall be regarded by us with more favor than those who work with their hands that they may work with their brains." The announcements in the first registers, or annual catalogues, were guarded and discreet. It was recommended that no student should come entirely without resources; it was stated that the university could guarantee employment to no one; and in subsequent publications it was announced that the number of students applying for labor constantly exceeded the number that the university could employ.

The idea of self-supporting labor combined with collegiate studies proved, in spite of this precautionary announcement, a very taking one. Great numbers of young men presented themselves, eager to be set at work and to begin their college course. A few of these could undertake skilled labor, but the great majority were unskilled in any trade and a considerable number were unfit for labor of any kind. The embarrassment arising from this proved very great and often

extremely painful. The organization of the labor corps was in the charge of W. A. Woodward, at that time business manager of the university. A daily record of matters connected with the business department was kept for the first few years by Mr. Woodward and much of this has to do with the difficulties he experienced in providing work for students and in supplying them with rooms and board at terms moderate enough to meet their needs. The following extracts from his record will give some idea of the conditions surrounding the experiment:

October 10, 1868: Several students reported a willingness to have a less elaborate supply on the table if the price can be reduced to $3.

October 13, 1868: We propose to deduct 50 cents per week from the board of each student who will use water instead of tea or coffee. Many students represent themselves as too poor to pay their board without work and large pay. In several cases they demand board, room rent, lights, fuel, and tuition for services. Several notices to quit are served on me. They consent to remain on being reasoned with.

October 14, 1868: A student applies for return of his money. Wants to go home. He is 15 and evidently homesick. Says his head aches and his lessons are too long. Adopted the rule not to return money to students who get homesick or wish to leave the institution. X. reports himself recovered. Concludes to stay and requests that we will not send the letter to his mother.

October 14, 1868: Thirty students were set to work at 2 p. m. Some were employed in taking down the old stone store on Eddy street, others removing timber, shingles, stone, etc. Three were engaged in cutting out the road on Mrs. Cornell's farm north of the bridge across Cascadilla Creek and fifteen or twenty on landscape work, removing the mound of earth south of Cascadilla building and adjoining Mr. Gile's property, removing the earth to grade southwest of Cascadilla building. Several students distinguished themselves for their ability in management of work to advantage, and all work with alacrity. C. is A1. N., R., and many others showed themselves superior to any skilled laborers.

October 15, 1868: Thirty students were employed. Directed C. to note the efficiency of each workman and report as to value of services. Mr. Cornell thinks that there are some carpenter students who have their tools with them. We can employ all such profitably at fair wages.

October 16, 1868: Repeated my instructions to Mr. B. to discharge his hired waiters and employ students who were willing to do duty. He says he can get plenty of them.

October 17, 1868: Corps of students were employed this morning, using all the tools that we had on hand, and about twenty continued to work all day, while about the same number worked but half the day (Saturday).

October 24, 1868: An increased number of students ask for labor. The matter of labor, as organized, has become quite popular and pleasing to those who perform it. My best success is to organize squads of seven and an overseer who works with them, making eight persons, but to-day the number has so increased as to overflow our squads, requiring more companies, which we are organizing.

The compensation paid to students for work at this time seems to have been at the rate of from $1 to $2 per day, according to the kind and quality of the work. Carpenter work seems to have been paid at the highest rate. The list of labor corps furnished by the superintendent of the grounds and buildings on November 1, 1868, numbers over 70; 20 or 30 more seem to have been employed by other univer-

sity officials. A considerable number of students were employed in the construction of the university buildings. The amount paid for student labor during the first year of the university was from $800 to $1,000 per month.

The university seems to have suffered somewhat from the invasion of doubtful characters, who were attracted by the possibility of earning a living with a few hours' labor each day and at the same time acquiring the honor of becoming connected with a university. Mr. Woodward records that "a fellow from the Rochester penitentiary has given out that he is employed at Cascadilla House," and again, that a student who had been dismissed from Harvard was living in Cascadilla and had failed to meet his bills.

Notwithstanding the difficulties connected with the labor experiment, it was carried on for several years. During the first three years from $8,000 to $10,000 per year was paid for student labor. This fell to about $6,000 the fourth year, and steadily decreased until in 1882–83 only $1,400 was paid. From 1868 to 1883 a total of over $68,000 was so expended.[1]

Since the establishment of a system of university scholarships and the students' loan fund the university has ceased to offer any considerable opportunities to students for manual labor. The experiment, while it enabled a considerable number of students to pay wholly or in part the expense of their university course, was considered by the trustees a failure. Never having formed any part of the original plan as embraced in the land-grant act or the charter, and having been adopted mainly out of deference to the philanthropic purposes of Mr. Cornell, its failure could arouse no stronger sentiment than a sincere regret that so noble a plan should prove impracticable. Even so, its impracticability seems to consist not so much in the idea of combining self-supporting labor with collegiate studies as in the attempt of the university to supply the necessary labor. Even at the present time it not infrequently happens that students are able to do much toward their own support by laboring a few hours each day in such occupations as are open to them. Those have succeeded best who have been skilled in some occupation for which there is a demand at the university or in the town. During the existence of the university printing office, now discontinued, a considerable number of students supported themselves by typesetting. If a young man in good health has a trade and an opportunity to follow it, there seems to be no reason why Mr. Cornell's idea is not a sound one, so far as such a student is concerned. The failure comes, under existing conditions, mainly in the case of those who can offer only unskilled labor.

Nor can it be said that even as to these the plan is really impracticable. Given the opportunity to labor, and there are many who could, and would, earn enough by working a few hours each day to go far

[1] Alumni Report, by James Fraser Gluck, 1884, p. 17.

toward their support at the university. There are now men very high in scientific, professional, and educational circles whose opportunities were found not only in lecture rooms and laboratories of Cornell, but also in the trenches dug and the stones chiseled in the making of campus and buildings. Even in the face of the decreed failure of the student-labor idea, it can not positively be said that the plan of combining manual labor with collegiate study may not yet be shown to be not only the most practicable, but even the most useful and the noblest form into which a college can cast its endowments for undergraduate scholarships.

E. Fellowships and Scholarships.

The original endowment for fellowships and scholarships at Cornell grew out of what at first appeared a great calamity. In 1872 the university was in sore financial straits, and for a time it seemed that all new plans would have to be abondoned and even some existing departments curtailed or abolished. It was, perhaps, the darkest hour the university has ever seen. At this juncture Ezra Cornell, John McGraw, Henry W. Sage, Hiram Sibley, and Andrew D. White contributed in the aggregate the sum of $155,000 for the purpose of tiding over the difficulty. Through the thoughtfulness of the Hon. George W. Schuyler, until his death a valuable member of the board of trustees, the condition was inserted in the gift that whenever the university should have sufficient funds for the purpose the sum then contributed by the five trustees named should be set apart for an endowment for fellowships and scholarships. The proposition caused some amusement when read, but was accepted.[1] What seemed so improbable in 1872 was really accomplished in 1884. The total sum of $155,000 was then set aside for the purpose contemplated by Mr. Schuyler's proposition, and in addition $50,000 of Mr. Sage's endowment of Sage College was made available for scholarships for women only. With the income from these sums nine undergraduate scholarships were annually awarded upon competitive examination, each paying the holder the sum of $200 a year for four years.

Subsequently the three scholarships for women were withdrawn, but in 1889 three additional scholarships, open to all students, were added, so that the number still stood at nine granted yearly, or thirty-six in all. The term of a scholarship was subsequently limited to two years, so that eighteen are now awarded annually. Later the Frank William Padgham scholarship in mechanical engineering was endowed by Amos Padgham, of Syracuse, as a memorial to his son, who died while a student of the university. It is open only to students of the public schools of Syracuse.

For graduate students there were first provided seven fellowships, to

[1] Unpublished MS. in possession of President White; Annual Report by President White, June 20, 1883, pp. 83, 84.

which was added an eighth in 1885. By the terms of the gift of his library in 1887, President White provided for two fellowships in history and political science of the annual value of $500 each, which became available in 1891. With the establishment of the Susan Linn Sage School of Philosophy, three additional fellowships in that department were added of the value of $400 each, and also six graduate scholarships of the value of $200 each. Subsequently there were established two fellowships in political economy and finance, two in Greek and Latin, and one in American history. In all, down to 1893, there were eighteen fellowships and six graduate scholarships established.

In October, 1893, there were added to the above five additional fellowships and ten graduate scholarships, and in 1896 the Oliver graduate scholarship in mathematics. These and all existing fellowships and graduate scholarships were placed at $400 and $200 per year, respectively. In 1894, upon the adoption of the requirement that graduates should pay the regular tuition fee, the fellowships were raised to $500 each, and the President White fellowships to $600 each, and the graduate scholarships to $300 each. There are now awarded annually twenty-three fellowships and sixteen graduate scholarships in the general and technical departments.

The giving of scholarships and fellowships was a favorite idea with President White, and the establishment of the system was among the last of the official acts of his administration. In his last report he says:

> Nothing that this board has ever done has, in my judgment, shown its value more immediately and conclusively. No doubt the offering of these scholarships was one of the leading causes of the great and sudden increase in the number of students entering last year. But there is another result far more important than that, and this is that a much larger proportion of students entered with a high grade of preparation. . . . It is to be hoped that as time goes on the number of these university scholarships may be gradually increased. To endow more of them would be a most worthy exercise of private munificence.

In addition to these university scholarships there is established, under the charter of the university, one annual scholarship for each assembly district in the State, such scholarship entitling the holder to free tuition for four years. Down to January, 1895, there were 128 assembly districts, and 512 students were therefore entitled to free tuition each year. Since that date there have been 150 assembly districts and 600 free scholarships. Reckoning tuition at $100 a year (it is $125 in some courses), this gives an aggregate annual value of $50,000. If the actual cost of educating students be considered, the total is much larger, as is pointed out by President Schurman in his annual report for 1892–93.[1] In addition, the university educates free of cost all students in agriculture.

Taking into account all its free gifts to education, Cornell bestows annually $50,000 in State scholarships, $7,200 in undergraduate schol-

[1] Page 49.

arships, $4,800 in graduate scholarships, and $11,700 in fellowships, or a total of about $75,000.

F. College Societies.

College societies naturally divide themselves into two classes, those which are organized for literary or other educational purposes and those which are organized for social purposes. Of the first class there have been many at various times during the history of the university, and are many at the present. The purely literary society, however, which follows the traditions of the old literary societies of the Eastern universities has never flourished at Cornell. The Philolathean, the Irving, and the Curtis have all disappeared after a few years of struggles and doubtful success. The debating clubs have had a somewhat more successful career. Among the earliest of these was the Cornell Debating Club, which, however, ceased to exist some years ago. It was replaced by the Cornell Congress, an organization formed in imitation of the House of Representatives and devoted mainly to the discussion of public and political questions. It has always been a successful and useful organization. Within the last two years other debating clubs have been formed, chiefly through the efforts of Prof. Duncan Campbell Lee, and have had a fair measure of success. Intercollegiate debates have been held during the past six years with the University of Pennsylvania.

A large number of societies connected with various departments of work are in existence, such as the Classical Association, History and Political Science Association, Natural History Society, the Agricultural Association, the Architectural Club, etc.

The social clubs are for the most part Greek letter societies, maintaining some semblance of secrecy in their organization and procedure. Of these, between thirty and forty are now in existence, and most of them occupy houses in which their members lodge, and some have erected structures specially for this purpose.

Those members of the university who do not belong to Greek letter fraternities are generally known as "Independents." At many times in the history of student life at Cornell the relations between the fraternity men and the independents, especially with reference to matters of class politics, have been strained. In one or two instances senior classes have had two distinct organizations, one composed mainly of fraternity members and the other of independents. In later years, however, this opposition between the two elements has largely disappeared, and divisions upon matters of student concern are generally along other lines.

G. Students' Publications.

The first student publication was the Cornell Era, which was begun within a few months after the opening of the university in 1868. It

was originally published by members of the Greek letter fraternities, but afterwards passed under the control of editorial boards chosen from the two upper classes. It is still continued as a weekly publication, being now in its thirty-first volume.

The Cornell Times was begun in 1873, as a rival of the Era, but was continued for only a short time, and ceased publication in 1874.

The Cornellian, which is the college annual, was begun in 1869, under the editorship of the Greek letter fraternities. In 1883 it passed into the control of editors selected from the junior class, the class of 1884 being the first to issue the annual, which is still published annually by editors selected by the juniors in the university. The Cornell Review, a monthly publication, was begun in 1873 and ceased publication in 1886. The Cornell Magazine was the successor of the Review, and has been published monthly since 1888.

The Cornell Sun, a daily paper, was begun in 1880 and is still published by editors selected from the various classes of the university.

The Crank was begun by students in the department of mechanical and electrical engineering in 1886. This name was changed in 1890 to the Sibley College Journal of Engineering, and under this title it is still published.

Two illustrated papers have been published by students of the university. The first, known as Cocaigne, was begun in the spring of 1878 and continued during the rest of that college year. The second, known as The Widow, was begun in the fall of 1894, and has since been regularly issued biweekly.

A single number of The Cornell Law Journal was published in June, 1894. In the fall of that year the plan of the publication was changed and a law periodical known as The New York Law Review was issued in January, 1895, but ceased publication in June, 1895.

A quarterly periodical known as The Bulletin was first issued by the University Christian Association in 1886, but ceased publication in 1896.

H. Athletics.

The early athletic interests of Cornell were mainly confined to boating. The first boat club seems to have been organized in 1871, and the first regatta was held on Cayuga Lake in 1872. It was not until 1873 that the university took part in an intercollegiate race, in competition with eleven colleges. It again contested in 1874 with nine colleges. The success of the crew in these races was not marked, as it won only fourth place in the first and fifth place in the second, but in 1875, under the management of Captain Ostrom, the Cornell navy began a series of victories which has continued with few interruptions down to the present time. In that year an intercollegiate 'varsity race and also an intercollegiate race between freshman crews were held on Saratoga Lake. In both of these races Cornell was successful, in the first rowing against twelve colleges and in the second against three freshman

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crews. It was on this triumphal occasion that the Cornell yell is said to have been invented.

The genesis of the yell is a matter of some doubt, one explanation being that it is merely an inverted form of the Yale refrain, "Eli, eli, eli, ell," the Cornell form being "Cornell, I'ell, 'ell, 'ell," which developed speedily into "Cornell, I yell, yell, yell, Cornell."

In 1876 Cornell was again successful at Saratoga in a race against five colleges, and the freshman crew in a race against two colleges. After this year the Intercollegiate Rowing Association was disbanded. In 1878 the freshman crew was successful against the Harvard crew. In 1879 the crew was sent to Saratoga, but no competitors appeared to contest the race. Since the disbanding of the Intercollegiate Rowing Association the Cornell navy has contested with various colleges at various times, and for ten years, from 1885 to 1894, it did not suffer a single defeat. In 1895 it was defeated in the races at Henley and in a race with Columbia and Pennsylvania on the Hudson. In 1896 the 'varsity crew won in a race on the Hudson over Harvard, Pennsylvania, and Columbia. In 1897 it won in a race with Harvard and Yale, and in another with Pennsylvania and Columbia. In 1898 it won over Harvard and Yale at New London, but was defeated by Pennsylvania in a race at Saratoga. Since 1888 all races have been in eights.

In baseball, football, and general athletics there have been 'varsity teams for many years.

The entire athletic interests of Cornell were united in 1889 under the corporate name of the Cornell Athletic Association. The trustees of this association, seven in number, unite with two undergraduates from the Navy, two from the baseball club, two from the football club, and two from the athletic club to constitute the athletic council. Under the direction of this council the athletic interests of the university have been centralized and systematized. The council has exercised a potent influence in the management of the finances of the association and in the control of athletic contests. Little, if any, complaint of athletic excesses has been made since the organization of this council.

In 1889 William H. Sage gave to the athletic association an athletic field of nearly 10 acres, and J. J. Hagerman, of Colorado Springs, gave the necessary funds to lay out and equip the field. These grounds are known as Percy Field, in honor of one of the sons of Mr. Hagerman. There have been built upon the field a quarter-mile cinder track, a clubhouse, and a grand stand, and all contests in football, baseball, and track athletics are held there. The field has been enlarged by an added gift from Mr. Sage, and by purchase.

I. Government of Students.

Government of students at Cornell has naturally presented the same problems and difficulties as at similar institutions. There has been, however, as little paternalism as possible, and the students have enjoyed the greatest liberty consistent with good order. In the

absence of dormitories it has not been necessary for the university authorities to intervene in student affairs except where there has been a flagrant breach of public order or of university regulations. The most serious difficulties have grown out of what is known as "class spirit." This has exhibited itself in cane rushes, attempts to disturb or break up class banquets, and other similar disturbances, but of late years this has disappeared.

During the first year or so most of the students were under military discipline, and comparatively little difficulty was experienced in maintaining order. Nevertheless, there seem to have been two or three outbreaks of "students' frolic," and on one occasion there was strong suspicion that students were responsible for the burning of a small building to which they had some no[illegible]easonable objections. Probably no class ever entered a univers[illegible]which contained so many and different elements as the first class [illegible]h entered Cornell. Some of these men had naturally acquired [illegible]ts which were not in keeping with their new surroundings, and th[illegible]ulty and executive committee were troubled to prevent such stude[illegible]rom becoming a source of disturbance among the other students a[illegible] a reproach to the university.

It was a part of President White's [illegible]iginal plan that the students of the university should govern them[illegible]lves, but no definite plan to this end was devised and put into pra[illegible]ce during his administration. Matters of discipline were brought befo[illegible]e the faculty, and after investigation action was taken by that body. The same course was pursued during the administration of President Adams. For a short period recently a plan was in operation for the government of students by a body selected by themselves and presided over by the president of the university. This self-government council investigated all matters of discipline and decided upon the guilt or innocence of the accused. In case of conviction it recommended the penalty to be inflicted, and then certified its action to the faculty. The faculty reserved the power to approve or reverse the action of the council. As a matter of fact, it never failed to approve such action. The whole question of student government seemed to be very much simplified by this experiment, and the results, while not escaping criticism in some quarters, were such as to encourage the belief that self-government was feasible. Upon the reorganization of the faculties in 1896 the scheme dropped out of view and has never since been revived. At present discipline is in the hands of the special faculties, each exercising discipline over its own students.

VIII.

THROUGH THREE ADMINISTRATIONS.

A. The Administration of President White.

It remains to sketch briefly the administrations of the three presidents of Cornell. Much that might be gathered under this head has

been anticipated in the preceding chapters, but many characteristic features remain to be mentioned.

President White's administration lasted from his election in October, 1866, to his resignation in June, 1885, a period a little short of nineteen years. During this time he was twice absent in Europe, first in search of health, from 1876 to 1878, and again as United States minister to Germany, from 1879 to 1881. During these absences the university was administered by the vice-president, William Channing Russel, who retired in 1881.

1. EDUCATIONAL GROWTH.

The development of the curriculum and the growth of departments have already been sketched in a preceding chapter. It will be seen from the statement there made that the founder's ideas of the union of liberal and practical education and large liberty in choice of studies were steadily and constantly developed during this period. New subjects were added and new professorships established as the funds at the disposal of the university seemed to justify. There does not seem, however, to have been any marked divergence from the general plan outlined in the report on organization. The university register for 1884–85, the last one published during President White's administration, shows that the division of courses into "general" and "special" still existed. Of the general courses there were five—arts, literature, philosophy, science, and science and letters Of the special courses there were eleven—agriculture, architecture, analytical chemistry, chemistry and physics, civil engineering, electrical engineering, mechanic arts, mathematics, natural history, medical preparatory, and history and political science. The five general courses were merely a modification and development of the five general courses recommended by President White in his original report, the main difference, as already pointed out, being that in place of one distinctively optional course each course provided for certain required studies, consistent with the general character of the course, and at the same time left a reasonable number of hours in each term, varying from three to twelve of the fifteen required, to be filled as the student should elect. This optional work was in the main confined to the junior and senior years, although in one or two courses there were some optional hours in the sophomore year. In the special courses, not so much latitude could, in the nature of the case, be expected, and for the most part the work in those courses was prescribed, save that in some there was an option among certain allied subjects, and in some, as mathematics, natural history, and history and political science, there was a moderate provision for election.

There was steady improvement also in the quality of the work at the university. This was made possible by a gradual raising of the standard of admission and by an increase in the teaching corps. The

effect of the first was to insure a body of well prepared and disciplined students, and of the second to secure to professors the leisure necessary for advanced work. In most departments having any considerable number of students one or more assistants, ranking as assistant professors or as instructors, were from time to time appointed to relieve the professor in charge from much of the routine work of the class room. The leisure thus secured was devoted to investigation in more advanced fields, into which students whose tastes lay in that direction were encouraged to enter. The introduction of seminary methods of study in literature, languages, history, political science, and like subjects, and the special and patient investigations in the field and laboratory, tended constantly, under these conditions, to strengthen and broaden the university idea.

The success of the idea of liberty of choice in university students became more and more marked as the university expanded. This is seen not only in the extension given to the policy at Cornell, but in its adoption at other institutions. Indeed, so marked was the tendency among the latter as to lead to a hasty conclusion that one of these was the originator of the idea.[1] It is not to be claimed, of course, that the idea originated at Cornell, for President Wayland had long before suggested the need of greater liberty in college courses, and President Tappan had introduced at the University of Michigan the device of parallel courses of study, though under conditions and limitations which made the experiment far from satisfactory. The originality of President White's plan lay in its adaptation of these earlier theories and experiments to new and untried conditions. There was, first, the great division of all courses into the general and special, with an ample number of parallel courses in each division; and second, the provision, especially in the general courses, for a generous amount of purely elective work. A large liberty of choice was thus granted the student at the outset of his academic life in the choice of a course or general line of study and later in the choice of the particular branches of study wanted in the chosen course.

In one feature directly related to this liberty of choice Cornell could justly claim to be unique, and in this feature rests her claim to the leadership of the "new education." This feature was the scope and diversity of work from which the student might make his choice. It had been the aim of Mr. Cornell and Mr. White to build a university adapted to the growing needs of the nineteenth century. The union of the literary and practical courses of study upon an absolute equality with a perfect liberty of choice in either the one field or the other, or in both, had been the outcome of this purpose. This it was that rendered Cornell from the first a unique educational experiment and rallied to her support the captains of industry as well as the progressive leaders of academic thought. Hitherto the university

[1] See statement in Thwing's American College, p. 20.

had seemed to exist solely for the professional and social classes. Cornell appealed equally to them, but extended her appeal to the industrial classes as well. It sought to touch every interest of the people with equal and impartial hand, bestowing upon all alike the educational benefits of the nation and the founder. It thus dignified labor, whether at the forge or at the desk, and infused into higher education the dominant democratic spirit of the age.

This bold challenge to old academic traditions did not pass unanswered. The older colleges declared the experiment foredoomed to failure, and an eminent educator, now the president of a venerable and powerful university, gave it as his deliberate judgment that the practical spirit and the literary and scholastic spirit were incompatible within the same walls.[1] It has demonstrated the error of that judgment, while the rapid growth of the idea of such a union of literary and practical studies, both in this country and England, has been a fine tribute to the wisdom and courage of the leaders of the "new education."

To sum up, it may be said that the development of that curriculum and the expansion of departments during President White's administration were merely the natural growth of the founder's ideas, with such modifications as were suggested by experience or rendered necessary by existing conditions. Literary and practical studies were added as means would permit. New courses were established. Old courses were modified or extended. Larger and fuller liberty was granted in the choice of studies within the courses. Absolute and perfect equality was maintained among all departments. There was throughout a consistent purpose to reach the aim set up in the inaugural address: "The adaptation of the university to the American people, to American needs, and to our own times."

2. MATERIAL GROWTH.

The two buildings now known as Cascadilla Place and Morrill Hall soon proved wholly inadequate for the needs of the university. Early in 1869 a large wooden building was erected as a temporary expedient, but although building after building followed, this wooden structure proved a necessary refuge for more than one overcrowded department, and it was not until 1890 that it finally disappeared from the campus. In the fall of 1870 the north university building, now known as White Hall, and in architectural features the duplicate of Morrill Hall, was completed at a cost of over $80,000. In 1871 two friends of the "new education," both of whom were successful captains of industry, gave each a building as a testimonial of their interest in this effort to reach and raise the industrial classes. The first was the McGraw Building, given by John McGraw; the second, Sibley College, given by Hiram Sibley. In 1875 Sage College, the gift of Henry W. Sage, was for-

[1] President Eliot in the Atlantic Monthly, vol. 23, p. 215.

mally dedicated, and in the same year Sage Chapel was also given to the university by the same generous donor. To the Sage College was added in 1882, by Mr. Sage, the botanical laboratory and greenhouses. In 1871 President White built a handsome brick residence on the campus, at a cost of $50,000, which has since been occupied by himself, but which he has given to the university as the "president's house." In 1883 Franklin Hall and the gymnasium and Armory Hall were built by the trustees. In the same year the memorial chapel was added to the Sage Chapel. During this period, also, many residences were built on the campus by the professors. At the close of President White's administration the annual income of the university was about $225,000. The productive funds amounted to about $3,750,000. The amount invested in buildings and grounds was nearly $1,000,000, and in equipment about $400,000. The total value of the university property, exclusive of its Western lands, was upward of $5,000,000. In addition, the university held at that time the splendid endowment given by Mrs. Jennie McGraw Fiske. The latter, however, was subsequently lost as the result of a contest in the courts.

3. Religious Features.

By the terms of its charter Cornell is made strictly a nonsectarian institution—as fully so, in fact, as the public schools of the State. Of the propriety of this there seems never to have been any doubt in the minds of the founders and friends; nor has any argument ever been urged against it which would not, with equal force, apply to the whole system of public instruction. In the new field which Cornell was to occupy there was no room for theological controversies or sectarian wrangling and as little for particular denominational control. To a complete emancipation from all this the charter pointed the way in its prohibition that "at no time shall a majority of the board be of one religious sect or of no religious sect" and its provision that "persons of every religious denomination or of no religious denomination shall be equally eligible to all offices and appointments." These commands of the charter were from the first unswervingly obeyed by the founders and their colleagues. In his inaugural address President White dwelt upon them as embodying a great fundamental principle of the "new education" which "accepts fully the principle of religious freedom in higher education, as we all receive it in general education." "We will labor," he declared, "to make this a Christian institution—a sectarian institution may it never be."

This bold position naturally led many of the more timid clergymen throughout the State to take fright and, in their nervousness, to say and do some foolish things. The stronger and wiser, however, had no fear of true learning, and the end has amply justified their faith. It would be of no service now to revive the bitterness of attacks which have happily well-nigh ceased. A misunderstanding of the true pur-

poses of the university, and perhaps a deep distrust of its policy so far as understood, led many well-meaning persons to apply to it epithets not calculated to strengthen it in the opinion of careful parents. It is simply a part of history that for fifteen years after it first opened its doors Cornell had to contend against the distrust, the prejudices, and even the avowed hostility of a large portion of the clergy of New York.[1] That it has outlived the sentiment is a tribute to its honest and straightforward management.

The purpose from the first was to provide religious and ethical instruction so far as this could be done without violating the spirit of the charter. To this end no one has contributed so largely as the Hon. Henry W. Sage. His was the generous hand that built the university chapel. One of his sons endowed it amply with a preachership fund; another son placed in it a fine church organ, which has added greatly to the beauty of its services. There each Sunday during the college year some eminent clergyman, selected for his high standing in his denomination and the respect he has won at large, speaks, freely as he will, the truth as he knows it. Attendance is purely voluntary, but, so far from there being any lack of interest, the chapel proves too small for the number who wish to attend, and during the past year it has been enlarged to double its original capacity.

Supplemental to the chapel is the fine building given by the late Alfred S. Barnes, of New York, to the university Christian Association, and called in his memory Barnes Hall. This building is used daily by the association for its various meetings and services and has become a kind of center for the social and religious life of the university. The association itself is very strong and is believed to have the largest membership of any college association in the country.[2]

Mr. Sage's earnest efforts for the higher life and thought among the students also led him, in 1884, to endow the Susan E. Linn Sage professorship of Christian ethics. This professorship was filled by the election of Prof. Jacob Gould Schurman, whose work has proved of the very highest value to the university and through it to the entire country. But Mr. Sage's generosity did not stop here, and, in 1890, he added to his previous endowment of $60,000 the further sum of $200,000 for the establishment of a school of philosophy.

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[1] The curious may care to look at the testimony of Dr. Samuel J. Parker, of Ithaca, before the investigating committee (N. Y. senate docs. 1874. No. 103, pp. 137–140). There is also among President White's papers a long and serious protest signed by a number of Ithaca clergymen who had been shocked because the young people were permitted to dance at one of Mr. Cornell's receptions.

[2] It is at least worthy of note that in this institution where all religious activities are purely voluntary and uninfluenced by any denominational impulse, the Students' Christian Association is the largest and perhaps the most perfectly and efficiently organized to be found in any college or university in the country.—*President Adams, Annual Report*, 1890–91, pp. 21–22.

Thus religion and ethics are a part of the strong forces that go to the making of men and women at Cornell University, and it is not too much to say that no institution in the world offers greater advantages for the development of a deep and reverential religious character.

The erroneous ideas which have prevailed as to the religious attitude of the university warrant the publication of the chief official statements on this point from the opening of the university down to the present time. They will be found below in chronological order:

The Cornell University, as its highest aim, seeks to promote Christian civilization; but it can not be sectarian. Established by a General Government which recognizes no distinctions in creed, and by a citizen who holds the same view, it would be false to its trust were it to seek to promote any creed or to exclude any. The State of New York, in designating this institution as the recipient of the bounty of the General Government, has also declared the same doctrine. By the terms of the charter no trustee, professor, or student can be accepted or rejected on account of any religious or political opinions which he may or may not hold. The success of the University of Michigan, where the faculty comprises men of all religious sects and of all parties, is a sufficient refutation of those who assert that an institution of learning must be sectarian to be successful. (First general announcement, 1868, pp. 18–19; Ibid., 2d ed., pp. 21–22.)

The second announcement, 1868, pp. 21–22.

Same as above, adding:

Simple religious services are held daily at the university chapel, which all students, except those specially excused for due cause shown to the faculty, are expected to attend. Students are also expected to attend some religious service on Sunday. (Catalogue for 1868–69, with announcement, p. 69.)

In the university chapel—the gift of Henry W. Sage—religious services are held, in connection with discourses to be delivered by clergymen of the various Christian denominations, selected, from time to time, in such a way as to give the best representation of the religious thought of the age and to exemplify the influence of Christianity upon the world. There are, also, daily chapel services to which students are invited, although none are compelled to attend. (Register, 1875–76, p. 39.)

The university, established by a Government which recognizes no distinctions in religious belief, would be false to its trust were it to seek to promote any creed, or to exclude any. The State of New York, in designating it as the recipient of the bounty of the United States Government, acted on this principle. By the terms of its charter, persons of any religious denomination or of no religious denomination are equally eligible to all offices and appointments in the university, and it is expressly ordered that "at no time shall a majority of the board of trustees be of any one religious sect, or of no religious sect." In the university chapel—the gift of Henry W. Sage—religious services are held and discourses delivered by representative clergymen of the various Christian denominations. (Register, 1880–81, p. 8).

Same as above, with this sentence before the last one:

This is understood to imply that while the university can not be identified with or under the control of any one religious denomination, it must, nevertheless, always be on the side of Christianity as opposed to irreligion and unbelief. (Register, 1885–86, p. 16.)

Sage Chapel. Memorial Chapel.

CORNELL UNIVERSITY.

Same as above, omitting "as opposed to irreligion and unbelief." (Register, 1886–87, p. 17; ibid., 1887–88, p. 16; ibid., 1888–89, p. 17.)

Substituting for interpolated sentence:

This is understood to imply that while the university can not be identified with or under the control of any one religious denomination, it must, nevertheless, always be religious in spirit. (Register, 1889–90, p. 16; ibid., 1890–91, p. 14; ibid., 1891–92, p. 14.)

Hereafter all special reference ceases except by way of description of the Sage Chapel and Barnes Hall and a general statement of the charter limitations as to religious control.

4. THE M'GRAW-FISKE WILL CONTEST.

Among the very earliest benefactors of the university was Miss Jennie McGraw, the daughter of John McGraw, the donor of McGraw Hall. When the university opened in 1868 its students received their first greeting from the chime of bells which her thoughtfulness and generosity had provided and which have continued to welcome all succeeding classes from the belfry in the McGraw tower and later in that of the university library. Upon the death of her father in 1877 she inherited the bulk of his great fortune, which during her short life she shared generously with the suffering and needy about her. About a year before her death she went abroad in search of health and was soon afterwards married at the American legation at Berlin, where President White then represented the Government of the United States, to Willard Fiske, a professor in the university and its librarian as well. Before leaving Ithaca she had given her architect, Mr. William Miller, carte blanche for the construction of a mansion just below the university grounds and overlooking the waters of Cayuga Lake. This mansion she was destined never to enter alive, for, returning to her native village after an absence of a year, she lingered for a few days within sight of its towers and then, on the 1st day of October, 1881, passed away.

When her will was opened it was discovered that she had left to the university a princely fortune. Forty thousand dollars was given to found a hospital for students on the campus; $50,000 was devoted to maintaining McGraw Hall; $200,000 was given in trust for the use of the university library. After these and other bequests, aggregating over a million and a half dollars, were paid, the residue of her estate was to be added to the fund for the use of the library. By the terms of this instrument her husband received $300,000 in addition to what she had already given him during their married life, and all of her near relatives received large bequests. The funds that actually came into the possession of the university under the specific bequests named and the residuary clause in the will amounted to over three-quarters of a million of dollars, while the real estate not converted into money would have brought the total up to about a million and a quarter.

This magnificent endowment the university was destined never to

secure. For reasons which have never been publicly known, but which arose out of disagreements with the executor of the estate on the one side and the trustees of the university on the other, Professor Fiske, who at first expressed himself as perfectly satisfied with the provisions of his wife's will, was induced to begin a suit for the practical annulment of the will of Jennie McGraw Fiske.

The principal ground on which the bequests to Cornell University were contested was, that by the terms of its charter its endowment was limited to three millions of dollars in the aggregate, and that as the endowment exceeded this sum at the death of Mrs. Fiske, the university had no capacity to take or hold the additional property bequeathed by her will.

The case was argued with great learning in the supreme court and the court of appeals, both of which decided for the contestants upon the principal ground maintained by them.[1] In the meantime, it should be said, Mrs. Fiske's relatives had appeared as contestants, claiming under a conditional provision in her father's will. They and Professor Fiske were united against the claims of the university.

As a last resort the university carried the case to the Supreme Court of the United States, contending that under the land-grant act and the charter, the entire proceeds of the land grant, including the Cornell endowment fund and the unsold lands, belonged in reality to the State, while only a present and conditional right to the income belonged to the university. Had this view prevailed it would have left the endowment of the university far less than three millions of dollars and would have saved the McGraw-Fiske bequests intact. But the Federal court also decided adversely to the university,[2] and after seven years of litigation the estate was divided between Professor Fiske and the McGraw heirs.

This loss would have been a very serious blow to the hopes of the university had not Mr. Sage, with continuing generosity, met the difficulty in a very characteristic way. Even before the contest was finally decided he pledged himself to be responsible for the cost of a suitable library building, to which a part of the fund was to have been devoted. The necessary funds for this purpose he advanced upon the understanding that in case the suit terminated in favor of the university they were to be repaid to him, otherwise to be a free gift. By this means work on the library building was begun, and on October 7, 1891, it was formally opened. At the exercises attending this event Mr. Sage presented to the university the receipts for $260,000, the cost of the building, and also for $300,000 for a permanent endowment. Thus the generous purposes of Jennie McGraw-Fiske have been in part accomplished, and it is not altogether improbable that the future may see even a fuller realization of her noble designs.

[1] 45 Hun., 354; 111 N. Y., 66.

[2] 136 U. S., 152, Justices Brewer and Gray dissenting.

UNIVERSITY LIBRARY (CORNELL).

5. OTHER FEATURES OF THE ADMINISTRATION.

One of the features of the administration worthy of special mention was the adherence to the original plan of nonresident lectureships. It was a favorite idea with President White that the regular work of the resident professors should be supplemented by nonresident lecture courses by eminent specialists in various fields of work. At the outset the men selected for these lectureships were such as to dignify the system and render its success certain. From 1868 to 1870 the lecturers were Professor Agassiz in natural history, James Russell Lowell in English literature, George William Curtis in recent literature, and Prof. Theodore W. Dwight upon the Constitution of the United States. The lectures were thrown open to the general public upon the payment of a small fee, somewhat after the now prevalent system of university extension lectures, and it is interesting to note from an old contemporary record that the fees thus received more than paid the expenses of the course, exclusive of the amounts paid to the lecturers. Later the lectures were thrown open to the general public without cost. Some of the later lecturers were Bayard Taylor on German literature, George Washington Greene on American history, James Anthony Froude on English rule in Ireland, Professor Von Holst on constitutional history, John Fiske on American history, Edward A. Freeman on European history, Charles Dudley Warner on recent literature, and many others. Most of these were lectures of from six to ten in number, but some were more extended, as the lectures of Felix Adler on Hebrew and Oriental literature and F. B. Sanborn on social science. The system has been continued down to the present, the number of lecturers annually increasing rather than diminishing. In the law school nonresident lecture courses have been given from the first by specialists in various fields, and during recent years frequent lectures have been given before the students in the engineering courses. The present tendency, however, seems to be toward calling lecturers for single lectures, rather than for more extended courses.

In the matter of the æsthetic environment of the university President White was also especially interested. Owing to the limited resources of the university his plans in this respect were not often carried out, but he himself gave largely and encouraged others to give for such adornment of the university buildings and grounds as was possible. One of his earliest gifts consisted in fitting up with substantial furniture and a considerable number of fine engravings and bronzes a room in White Hall for the joint use of the literary societies and the University Christian Association. After the demise of the literary societies the Christian Association became the sole beneficiary of this gift, and the engravings and bronzes were removed to Barnes Hall when that building became the home of the association. President White was also deeply interested in the department of architecture and gave largely in books and money for the equipment of that

work. The placing of portraits and memorial windows was also largely due to his interest and often the result of his own generosity. It was he who brought about the building of the Memorial Chapel and the placing in it of the memorial windows and statues. He also had much at heart the matter of the erection of an alumni hall, which should be the repository of memorials and works of art. This has not yet been accomplished, although he has made a generous offer of a considerable sum of money if the alumni of the university will subscribe enough more to erect a suitable building. Since his administration closed the department of classical archæology and history of art was established, and in connection with it there has been equipped a fine museum of classical archæology through the generosity of Henry W. Sage.

Another favorite plan of President White's was to provide for such instruction as would best fit students for the profession of journalism. During the earlier years occasional courses of lectures were given by journalists, and the work in the department of English was to some extent adjusted to the prospective needs of those who intended to enter the profession. At one time, after the close of President White's administration, there was a regular course in journalism, under charge of Prof. B. G. Smith, who had had an extended experience in newspaper work. This was subsequently abandoned, and since that time no special provision has been made for the training of journalists. It is thought that a thorough training in language and literature, in history and political science, and in the art of composition will afford the main preparation that can be offered by a university.

6. RESIGNATION OF PRESIDENT WHITE.

At the end of the college year in June, 1885, President White laid down the burdens of the office which he had borne for nineteen years. His resignation was received on all sides with unfeigned regret. Trustees, faculty, alumni, and students united in the common expression of appreciation for his noble and beneficent services. As the early friend of the founder, as himself in a very true sense a founder, he was justly regarded as the greatest personal force in the university system and the highest exponent of its policy and spirit. His resignation seemed, therefore, to many friends of Cornell almost an irremediable calamity. Happily the foundations of the university had, largely through his wise efforts, been laid too deep and broad to need the additional support of any particular man, and the wonderful progress of Cornell since 1885 has dissipated all fears as to its future, while it has tended to strengthen the appreciation of the wisdom and devotion of its first president.

When President White resigned his office on the 17th day of June, 1885, a little more than twenty years had elapsed since Cornell University came into existence. From a name it had grown into a splendid reality. From an experiment it had passed through all the vicis-

situdes of shifting public opinion, of sincere and fair-minded doubt, and of open and often ungenerous criticism and opposition into the security of a triumphant success. It had become in a very true sense "a people's university," in touch with all their interests and needs and aspirations, and the people had rallied to its support. Its material growth, its educational triumph, its firm adherence to the rational principles and policy of its founders, its steady and growing influence upon the intellectual and moral life of the State and nation were everywhere recognized and everywhere gave it an importance which no institution of like age could equal and few of even vastly greater age could excel. It was no light thing that the man who took up the burdens of such an undertaking at thirty-four could lay them down at fifty-three with these just words:

Whatever pride we may take in the growth of the institution under our care, I feel that we have a far greater cause for satisfaction in the triumph here and elsewhere of those principles in which our university was founded and which, in some respects, it was the first to represent. Among the facts resulting from these principles I may name the consolidation of resources for higher education; a closer union between the advanced and the general educational system of the State; unsectarian control; the equal eligibility of all candidates for trusteeships and professorships, irrespective of sectarian or partisan connections; the presentation of various courses of study, each carefully framed to give a discipline and culture suited to the different characters, needs, and aims of various classes of students; the placing of all students in all courses on an equal footing as regards privileges; the development especially of a well-planned course in history and political and social science adapted to the practical needs of men worthily ambitious in public affairs; the more thorough presentation of the leading modern literatures, especially that of our own tongue; full attention to technical studies, both on the scientific and practical side; and, in general, the steady effort to abolish monastic government and pedantic instruction. All these ideas and tendencies, of which our university has been a leading champion, and for which it incurred in its early days much opposition and some obloquy, have now so far taken hold upon the leading American universities that their speedy and complete triumph is certain.[1]

The trustees sought in every way to express their regret at the president's resignation and their appreciation of his long and valuable services. They first desired him to accept the title of honorary president of the university, but this, out of deference to his successor and the best interests of the university, he felt constrained to decline. They also offered to secure an amendment to the charter, making him a trustee for life, but this he declined on the ground that it would establish a doubtful and perhaps dangerous precedent. Later they elected him dean of the department of history and political science, or, as it was named in his honor, the President White School of History and Political Science, but this also he declined, feeling, doubtless, that his presence in the faculty might prove embarrassing to his successor.[2] But when, in the usual way, he was elected to a

[1] Letter of resignation, Annual Report, 1885, 2d ed., pp. 73, 74.

[2] Resolutions of the trustees, ibid., p. 76; Proceedings of Board, etc., 1885–1890, pp. 39, 120.

seat in the board of trustees, he willingly accepted it, and in that position, and as a lecturer on history, he continues his work for the university which he helped to found and to build, and to the success of which he has contributed the best years of his life and the full measure of his great qualities of head and heart.

B. The Administration of President Adams.

1. Election of Charles Kendall Adams.

The second president of Cornell was Charles Kendall Adams, who was elected by the board of trustees to that position on July 18, 1885, and entered upon the duties of his office on July 21 of the same year.

The selection of Mr. Adams was the outcome of the belief that his training, his sympathies, and his recognized ability fitted him in a peculiar sense to carry out the great purposes for which the university had been established. Educated at the Michigan University, he had been for over fifteen years a professor of history in that institution, and had contributed in no small degree to its development and success. He had given particular attention to questions of University government, having studied the whole subject with great care, both in this country and in the Old World. Moreover, the character of the University of Michigan as an organic part of the educational system of the State and the general problems with which as such it had to deal had provided an excellent school for the training of a president of Cornell. It was felt that the future development of the university must be on the broad lines laid down by its founders, and that Mr. Adams would come to this work in a large and sympathetic spirit. His selection, although not unanimous, was therefore easily determined upon and quickly made. He had especially the support of President White, who had known Mr. Adams at Michigan University and entertained the highest respect for his abilities.

It is impossible to do more than sketch briefly the many features of this administration. It lasted precisely seven years, during which time the growth in material prosperity, in the number of students and professors, and in the development and extension of the curriculum was almost or quite unprecedented. Many of these features have already been anticipated.

2. Reorganization of Departments.

The first work which the new president undertook was a thorough study of the organization and relations of the departments of the university. A full report of the committee on reorganization, of which President Adams was chairman, was presented to the board in December, 1885, and was adopted as reported.[1] Many important changes resulted from this action, although not all were realized immediately.

[1] Proceedings of Board of Trustees, 1890, pp. 22–28.

CORNELL UNIVERSITY—READING ROOM OF UNIVERSITY LIBRARY.

Among the most important may be mentioned the temporary consolidation of the department of English literature with that of rhetoric and general literature; the establishment of a department of pedagogy; the extension of the department of chemistry; the entire readjustment of the department of history and political science. There were in addition many changes in the personnel of various departments, both by the resignation of professors and the creation of new chairs. Together with a general increase of salaries there was adopted the principle that a professor whose services are deemed indispensable shall be secured by the payment of whatever salary is necessary, without regard to the salaries paid to other professors.

Two important schools were created during this administration. The first was the school of law, which first opened its doors in 1887, and has since had a history of exceptional success. The other was the Susan Linn Sage School of Philosophy, which was organized under the endowment provided by Mr. Sage in 1890. These two schools rounded out in a very necessary way the scope of university instruction, and have added greatly to the reputation and usefulness of the university.

The increased interest in humanistic studies was especially marked. This was felt not only in new departments, or schools, like that of philosophy, but in the older departments of language and literature. In the departments of Greek and Latin there was a considerable increase not only in the teaching force and equipment, but also in the attendance. In his report for 1888–89, President Adams says that—

> Within four years the number of classical students in the university has increased by about fivefold. This increase is plainly owing to the superior instruction offered, to the greatly enlarged equipment of the seminary rooms for advanced work in the ancient classics, and to the very gratifying atmosphere of confidence and enthusiasm that has come to surround linguistic studies.

The enlargement of the department of English by the establishment of a professorship of rhetoric and English philology, distinct from the professorship of English literature, increased materially the usefulness and popularity of these studies. Without embarrassment to the efficiency of the scientific and technical departments, which indeed prospered as never before, the departments dealing with the humanities became not only more efficient by the increase of teaching force, but more useful by the increase of students who sought work in those lines of study.

3. COURSES OF STUDY.

The courses of study were also somewhat modified during President Adams's administration. In the first year of the administration the general course in literature finally disappeared; the course in science and letters was rechristened the course in letters; special courses in analytical chemistry and chemistry and physics were replaced by a single course in chemistry, which, however, disappeared in 1891–92,

the same end being obtained by specializing in chemistry during the last two years of the course in science; the course in mathematics, natural history, and history and political science disappeared, the first two coming under the course in science, the last under the course in philosophy; the course in industrial art not leading to a degree was introduced, but disappeared in 1892–93. The scheme of courses which prevailed during most of the administration was, first, general courses in arts, philosophy, science, letters; second, special courses in agriculture, architecture, chemistry, civil engineering, mechanical engineering, law, and, not leading to a degree, industrial art and medical preparatory. Practically the only change from this was the disappearance of chemistry as a special course in 1891–92.

There was a sharp advance in the amount of elective work permitted within the general courses. In 1884–85 the amount was from two to four hours in the second year, from nine to twelve in the third, and about the same in the fourth. In 1885–86 a practically uniform rule was adopted for all of the general courses. Under this there was an allowance of from two to five hours elective in the second year, thirteen in the third, and practically the whole of the fourth. In the course in science the student was required to devote at least nine hours of that elective in the third and fourth years to scientific subjects, while in the course in letters he must devote the same amount to literary, historical, and philosophical subjects. The electives were increased slightly in 1890–91 so as to make practically the whole of the third and fourth years of the general courses entirely elective.

One of the most marked and important features of the administration was the completer organization of post-graduate study and instruction. This was true not only of the general courses but of the special technical courses as well. The result was speedily seen in the large increase in the number of graduate students. In 1884–85 there had been 33; in 1891–92 there were 132, who were candidates for advanced degrees, and a considerable number more who were candidates for baccalaureate degrees.

By way of summary it may be said that the administration was characterized by greater simplification of courses, a larger scheme of elective studies, and more adequate provision for post-graduate instruction.

4. MATERIAL GROWTH.

The period from 1885 to 1892 was one marked by great material prosperity, not only in the increase of productive funds, but in the erection of buildings and the equipment of departments. Among the buildings erected were Barnes Hall, Morse Hall, the library building and Boardman Hall. The increase of buildings and equipment during the seven years is estimated at upwards of $1,000,000, while the increase in endowment by gifts and the sale of university lands was nearly $2,000,000. The final decision in the McGraw-Fiske will con-

test, resulting in loss of the bequests to the university, was a serious blow, but the generosity of Mr. Sage, in building and endowing the library, averted the more immediate embarrassment.

No feature of the administration is of more importance or of more lasting benefit than that which has to do with the university library. The large gift of Mr. Sage was supplemented by the gift from ex-President White of the great library, which for over thirty years he had been gathering; and other smaller gifts, together with yearly purchases, resulted in a large increase in the number of volumes, which, however, very inadequately represents the increase in efficiency. At the end of the administration the general library numbered over 100,000 volumes and 25,000 pamphlets, and the law library over 9,000 volumes. The gift of the President White library, which is especially rich in authorities relating to the French Revolution, the Protestant Reformation, and the history of superstition, including witchcraft, torture, and similar subjects, renders the library for certain lines of study the center of available authorities in America.

The increase in income was about $150,000, but the increase in expenditures kept pace with that in income. The salary list alone, during the year 1891–92, was upwards of $200,000, while the demands of various departments for equipment were often greater than the means for supplying them. President Adams early pointed out the need of enlarged resources. In his annual report for 1887–88 he said:

> The friends of the university everywhere ought to know that one of three things is absolutely necessary. Either the growth of the university must be arrested by the holding of the expenditures of the institution substantially where they now are; or secondly, the permanent funds of the university will have to be encroached upon as a means of providing for permanent improvements; or thirdly, assistance for the purposes of several departments needing new buildings must come from the friends of the institution. The trustees would be unfaithful to their trust if they allowed the present prosperity of the university to be built up by placing a mortgage upon its future. It has not been the policy of the university hitherto to content itself with what has already been attained. It must, therefore, in the future place its reliance, under God, not only upon such wisdom as it can command in the management of its investments and the administration of its affairs, but also upon the generosity of those who believe in its methods and rejoice in the work it is endeavoring to do.

The need is still as urgent as when President Adams thus emphasized it, although in the meantime the productive funds have largely increased and munificent gifts have been bestowed. Indeed it is difficult to anticipate a time when a growing university will have all the funds which it could desire and usefully expend in the cause of education.

5. INCREASE IN NUMBER OF STUDENTS.

The increase in the attendance of students during the seven years was very rapid. During the year 1884–85 the registration was 577, the new matriculates 251. During the year 1891–92 the registration was 1,538, the new matriculates 605, notwithstanding the fact that in

the meantime the tuition was raised from $75 a year to $125 in some courses and to $100 in others, and that the entrance requirements were materially increased. This increase in attendance was distributed throughout the different courses. In arts the registration increased nearly fivefold (from 30 to 142); in the engineering course over threefold (from 184 to 640); in philosophy the increase was about fourfold; the number of graduate students increased fourfold. The establishment of the law school also added materially to the total attendance. The total registration for the seven years was 7,986, representing 3,252 matriculates, as against 8,580, representing 3,599 matriculates during the preceding seventeen years. The total number of first degrees conferred was 1,036, as against 1,019 under the preceding period. The number of second degrees conferred was 111.

Some fears were entertained that the increase in tuition might operate to check the rapid growth in numbers, but in view of the history of the administration upon this point such fears seem to have been groundless. Whatever other objection might be raised against high tuition fees the argument from numbers is far from conclusive.

6. INCREASE IN FACULTY.

The rapid increase in the number of students made necessary a corresponding increase in the number of teachers, but this could not be accomplished speedily enough to keep the proportion as it was at the beginning of the increase in attendance. During the years 1888–89 and 1889–90, there were a larger number of students to each teacher than at any previous period since the first five years of the university. In 1884–85 there were 56 teachers to 575 students; in 1889–90 there were 99 teachers to 1,329 students; in 1891–92 there were 123 teachers to 1,573 students. The increase in the number of professors of all grades during the seven years was 20; the increase of instructors and assistants 67. This marked increase in the number of instructors was made necessary by the multiplication of sections in subjects required of large numbers of students, while the addition and development of departments swelled the teaching force in the higher ranks.

7. OTHER FEATURES OF THE ADMINISTRATION.

Among other interesting features of the administration may be mentioned the passage by the trustees of a statute providing for a "Sabbatical year" for professors. It is provided that any professor, acting professor, associate professor, or assistant professor who has served for at least seven years, may have a leave of absence for one year and that half of his regular salary may continue during his absence. This statute was passed in the belief that a year spent in rest and study by a professor who has been long in the service will result in much good not only to him but to the university as well.

Under its provisions many of the older professors have spent a year in Europe at the great seats of learning, making themselves acquainted at first hand with the results of modern research and methods.

There was also created the office of dean of the general faculty, who performed many of the duties previously devolving upon the president. He was the medium of communication with the students, the chairman ex officio of many important committees, and in general the executive officer of the faculty. This office materially lightened the labors of the president in matters of administrative detail, and rendered possible a more systematic management of the routine of the administrative department. The dean was appointed by the president, subject to ratification by the board of trustees. The following served as deans of the general faculty: Charles A. Schaeffer, 1886–87; Henry S. Williams, 1887–88; Horatio S. White, 1888–1896. Since 1896 Professor White has been dean of the university faculty created by the legislation of 1896.

The trustees also by a statute conferred upon the university senate an advisory power in the selection of professors. It was first provided that no election of a full professor should be made except upon the recommendation of a committee composed of all the full professors and the president.[1] This was found unsatisfactory and was replaced by a statute providing that the nomination of professors should be vested in the president, who should first present the name to the university senate. This body was empowered to consider the nomination and vote upon it, yea or nay. This vote, with any reasons the senate might wish to assign, was then transmitted with the nomination to the board of trustees for their final action.[2] The university senate was composed of the president and all full professors, a body which in 1891–92 numbered 35 members. Its duties were to assist the president, to counsel and advise in regard to all nominations for professorships, to advise in regard to courses of study, and in general to consider and advise as to questions of university policy and especially such as might be submitted to it by the trustees. The senate continued upon this basis down to October, 1893, when it was abolished by act of the board of trustees.

In the first year of his administration President Adams recommended that the university should confer honorary degrees upon its alumni or others who might be deemed worthy of this distinction. In accordance with this recommendation two honorary degrees were conferred in 1886, one upon ex-President White and one upon David Starr Jordan, a graduate of the university in the class of 1872, then president of Indiana University and since president of Leland Stanford, Junior, University. Down to this time the university had never con-

[1] Proceedings of Board of Trustees, 1885–1890, p. 314.

[2] Annual Report of the President, 1890, pp. 19, 20. Proceedings of Board of Trustees, October 21, 1890.

ferred any honorary degrees, and it had been tacitly understood that such action was contrary to its established policy. The alumni of the university, while recognizing that if honorary degrees were to be conferred at all, the two persons selected were eminently worthy of the honor, could not look with indifference upon this reversal of the established policy. They accordingly prepared and circulated a petition requesting the trustees to reverse their action so far as concerned the future policy of the university, and this petition, signed by an overwhelming majority of the alumni, was presented to the faculty and the board of trustees during the following year. The petition was favorably and unanimously acted upon by the faculty, and the trustees on October 22, 1886, rescinded their action of the preceding June, without prejudice to the degrees already conferred. This decisive action may be regarded as indicative of what is now the settled policy of the university upon this point.

8. RESIGNATION OF PRESIDENT ADAMS.

On May 5, 1892, President Adams resigned the presidency of the university, to take effect at the close of the college year, assigning as his reason for the step "grave and seemingly irreconcilable differences of opinion in regard to matters of administrative importance." While no further public statement has ever been made as to the precise nature of the differences which led to this step, it is generally understood that they were of a character honorable to all concerned, and that President Adams laid down the duties of the office in the conviction that by so doing he could best secure for the university a harmonious and consistent administration. In accepting his resignation the trustees testified to their high opinion of Dr. Adams and just appreciation of his work for the university in this minute, which was spread upon their records:

It is in obedience both to a sense of duty and to a feeling of strong personal respect and attachment that the trustees of Cornell University place upon their minutes this formal expression of their cordial appreciation of the services of Dr. Charles Kendall Adams as their chief executive officer during the past seven years.

He came into the presidency at a time when a great addition to the material resources of the institution demanded commensurate effort. New departments were to be created, old departments to be enlarged and reorganized, large additions were to be made to the faculty, and great extension given to the equipment.

It is not too much to say that President Adams distinguished himself by the fidelity with which his multifarious duties were discharged. The formation of his plans was marked by wisdom, and their execution by unwearied labor and care. In the choice of professors he showed remarkable sagacity. Rarely in the history of any institution has such a series of eminent professors been brought nto any faculty as that which has been introduced under his administration into Cornell University. A very striking testimony to the wisdom of his nominations is seen in the efforts which other leading universities have made to attract into their own faculties the men he has thus selected.

In the relation between the university and the National and State governments, and especially with the department of public instruction of the State of New York, President Adams has also shown his ability to deal with men in the conduct of large public affairs.

As regards the influence of the university on the public, and wide discussion of the leading educational topics of the time, President Adams, by his writing and speeches, has materially influenced the most enlightened public opinion of his country, and as a writer upon historical subjects he has done work which has elicited praise from the highest sources on both sides of the Atlantic.

His administration will be remembered in the history of Cornell University as equally important to the interests of the institution and creditable to himself, and we tender to him as a scholar, as an educator, and as a man the assurances of our sincere respect and regard, with our best wishes for his future success and happiness.

President Adams closed his official relations with the university on commencement day (June 17), 1893. His annual report, presented to the board of trustees on June 15th, concludes with these words:

I can not close this report without giving expression to my appreciation of the generous action of the board of trustees in connection with the acceptance of my resignation. I wish also to acknowledge with gratitude the hearty and more than cordial terms in which my relations with my colleagues and my parting with the university is alluded to in their reports herewith presented by the dean of the general faculty, the director of Sibley College, the director of the college of agriculture, the director of the college of civil engineering, and by the associate dean in behalf of the faculty of the school of law. I am also grateful for the expressions of regard that have come to me in so many ways from the students of the university. All these kindly and friendly sentiments are gratefully appreciated and fully reciprocated.

At the end of my inaugural address I used these words:

"In my hopeful moments I try to forecast the future. I see in imagination these courses of study perfected and extended; I contemplate new departments added and developed; I behold museums and laboratories established and amplified, and, as the crowning glory of all, I behold a great library arising to fulfill the provisions of a noble and unthwarted purpose. As I picture all these provisions shedding their influence for good or for evil over the future generatins of this State, and think of all their possibilities and promises, and see them in imagination crowning these beautiful hills, I reverently pray to God that all the fruits of wisdom and benevolence may be vouchsafed to the people of this State, and that all our efforts may be sanctified to the building up of noble men and women, and the universal furtherance of all good learning and of every form of Christian civilization."

As I look about me to-day I can not suppress a feeling of reverent gratitude that in the seven years that have since elapsed so much has been accomplished for the fulfillment of this hopeful prediction. Best of all, I rejoice that the university never before was in so good a condition as it is to-day, and in passing over the keys of office to my successor, I do it with the hope and the fervent prayer that the prosperity of the past seven years may prove to have been only a harbinger and a preparation for even greater prosperity in the years to come.

Dr. Adams assumed at the beginning of the next college year the presidency of the University of Wisconsin, where his talents and experience are helping to build up one of the greatest of the State universities.

C. The Present Administration of President Schurman.

On May 18, 1892, Jacob Gould Schurman, D. Sc., LL.D., was unanimously elected president of the university, and on June 17 he entered

upon the duties of the office. Dr. Schurman's election was received among the officers, alumni, students, and friends of the university with a degree of favor which amounted to positive enthusiasm. For seven years he had been connected with the faculty, first as professor of Christian ethics and later as dean of the Susan E. Linn Sage school of philosophy, and during that time had given evidence of the ripest scholarship, the broadest educational ideals, and the highest administrative ability. Moreover, he was a young man, being but 38 years old at the time of his election, and having still before him his best years of usefulness. Everything combined to make him the first choice of all and the fittest man for the place that could have been selected.

President Schurman's policy is clearly outlined in his inaugural address, entitled "Grounds of an appeal to the State for aid to Cornell University," delivered November 11, 1892, upon the occasion of his formal inauguration as president. The policy there announced is based upon the idea that Cornell is the State university of New York, just as, for example, the institutions at Ann Arbor and Berkeley are the State universities of Michigan and California. It proceeds from this premise to the conclusion that New York should support her State university in the same manner that Michigan and California support theirs. Cornell, he argues, educates yearly 512 sons and daughters of New York at an expense of over $150,000, free of charge.[1] New York ought, in justice, to bear this burden, appropriating yearly to Cornell not less than that amount. She has, in fact, never appropriated to that purpose one cent from her own treasury. Her sole benefaction has been to turn over to the university the gift of the United States, a gift represented by the land scrip fund, upon which the annual income has been about $20,000 and which will never exceed $30,000. Various urgent needs of the university call for State aid. Especially agriculture and veterinary science, subjects touching most nearly the interests of the State, call for immediate and ample appropriations. In view of these considerations the president announced the policy of calling henceforth on the State for the aid necessary to develop and maintain the university.

The policy thus inaugurated was speedily put to the test. The legislature of 1893 was asked to appropriate money for the erection and equipment of an agricultural building devoted to instruction and experiment in dairy husbandry. The result was an appropriation of $50,000, the first money ever voted directly to the university from the State treasury. With this money the dairy building was erected, and its formal opening in the fall of 1893 was the occasion of the first visit

[1]Since the adoption of the revised constitution, going into effect January 1, 1895, the number of assembly districts is increased to 150 and the number of free State scholarships may therefore aggregate 600 in all.

to the university of a legislative committee. Another appropriation was asked in 1894, and a like sum of $50,000 was voted for the erection of a veterinary building, to which $100,000 was added the next year. The latter building, however, belongs to the State as a part of the equipment of a State veterinary college, and is administered in behalf of the State by the trustees of Cornell University. Additional appropriations have been asked of the legislature for the maintenance of the college and have been granted. The legislature last year established a State College of Forestry and put it under the management of the university. Thus the policy announced at the inauguration has received recognition in successive legislatures and bids fair to become firmly established.

Another result, due largely to President Schurman's exertions, was the transfer of the land-scrip fund from a special fund, subject to possible loss or impairment, to the general funds of the State, on which the State will pay hereafter 5 per cent interest annually.

Other phases of the policy announced in the inaugural address were, the increase of the salaries of professors; the increase in the number of university fellowships and scholarships; the establishment of publication funds for the printing of contributions in various fields of learning; the establishment of new departments and chairs in fields as yet unoccupied; fuller and more adequate equipment for established departments and building and equipment of dormitories for students. For the accomplishment of many of these ends the president looks to private benefaction and for many he holds that it is the duty of the State to make provision.

The gist of it all may be briefly put. Cornell University was designed for the benefit of the people of this Commonwealth, but in accepting the land grant from Congress New York pledged State aid to the institution receiving the proceeds. This is Cornell University. . . . But the university has now reached a point in its development at which, if it is to furnish liberal and practical education to the largest numbers in all the pursuits and professions of life, it must have support from the public treasury as well as from the bounty of individuals. Thus only can the university fulfill its vocation of furnishing the highest education to all classes at the lowest cost. These ends are the ends of the State. It is dedicated to truth and utility; and between these there is no incompatibility; for, as Plato has well said, "the divinest things are the most serviceable." We are at once realistic and idealistic, and while we cherish the old we are always in quest of something better. The genius of Cornell University stands on the solid earth; and while his eyes front the dawn the ancient heavens are about him, and through all its resounding spaces he hears the noble mother call Excelsior! So may it be! So shall it be; for the people of New York will not suffer either private gifts or public grants to fail us.

During the comparatively brief period that has elapsed since the beginning of the administration several important changes have been made in the educational and govermental policy of the university.

The requirements for admission to the technical courses were mate-

rially raised. Like advances were made in the requirements for admission to the courses leading to B. S. and Ph. B. Finally the course in letters leading to the degree of B. L. was abolished, to take effect in 1896. This left but three general courses, that leading to A. B., that leading to Ph. B., and that leading to B. S. The first two differed mainly in the substitution of modern languages for Greek in the entrance requirements and in the work of the freshman and sophomore years in the course leading to Ph. B. In his report for 1893–94 the president argued for the abolition of the degree of Ph. B., and the conferring of the A. B. degree both in the general course requiring Greek and Latin and in the general course in which the modern languages are substituted for Greek. This would have resulted in the conferring in the general courses of only two degrees, A. B. and B. S., the first in courses in which the major work was in the humanities, and the second in the courses in which the major work is in science. But the faculty went further than this, and decided to grant but the one degree of bachelor of arts and to make all work in the department of arts and sciences (with very slight exceptions) wholly elective.

The requirements for admission to the course in law have also been increased to an equality with those in arts and sciences, and the course has been extended to three years.

The administration of the university has been changed or modified in several particulars. The first is by the abolition of the university senate which has been a body composed of full professors, advisory to the president in matters of educational administration and especially in the appointment of professors. By this change the powers previously vested in the two bodies are now vested in the president. Later the faculties were reorganized with special faculties as explained in Chapter VI. The second change is the increase in the membership of the board of trustees by the addition of fifteen elective members, ten of whom are to be elected by the full board and five by the alumni. A third change had to do with the government of students. There was created in 1893 a student council presided over by the president, and intrusted with all questions pertaining to frauds in examinations. Subsequently the powers of this body were extended so as to include all cases of student offenses of whatever character and the body was designated the student self-government council. It disappeared in 1896.

The increase in the number of students continued down to 1894, when, owing to the charge then first made for tuition for graduate instruction and the increased requirements for admission to the mechanical and electrical engineering courses, there was a falling off. The attendance has been as follows: 1891–92, 1,538; 1892–93, 1,700; 1893–94, 1,801; 1894–95, 1,689; 1895–96, 1,702; 1896–97, 1,808; 1897–98, 1,835. At the commencement exercises in June, 1898, President Schurman stated that during the six years of his presidency he had conferred as

many degrees as President White and President Adams together conferred in the preceding twenty-four years.

During the year just passed a medical college has been established in New York. Thus during President Schurman's administration three new colleges have been added to the university, veterinary science, medicine, and forestry.

The university completed its twenty-fifth year, since the date of its formal opening, on October 7, 1893. Appropriate ceremonies were held on October 6, 7, and 8 in celebration of the event. The oration was delivered on the morning of October 7 by the Hon. Chauncey M. Depew, and addresses were delivered by the Hon. Stewart L. Woodford, the Rev. Anson J. Upson, the Rev. E. N. Potter, Prof. G. C. Caldwell, and the Hon. Joseph C. Hendrix. An interesting feature was the presentation to Dr. Burt G. Wilder of a "Quarter Century Book," made up of original contributions from his former students who have become prominent in various fields of science. A dinner was held at the conclusion of these exercises at which telegrams and letters were received from various friends of the university, including Ex-President White, then minister of the United States at St. Petersburg; Gen. Meredith Read, the only surviving member of the original board of trustees, and Prof. Goldwin Smith, a member of the first faculty. The commemorative sermon was preached by the Right Rev. William Croswell Doane, Bishop of Albany.[1]

This anniversary occasion recalled to the seat of the university large numbers of former students and served to mark the large results of twenty-five years of progress. The campus, which had been a rough unfinished upland when the first body of students gathered upon it twenty-five years before, spread out in broad and well-kept lawns with winding avenues lined with stately elms. Where then stood a solitary building flanked by a temporary campanile, now rose fourteen noble structures in brick and stone, devoted to the varied activities of the modern Cornell. On the campus thirty-five cottages and five fraternity halls housed professors and students; 145 teachers and over 1,600 students wrought together on that beautiful hillside. Great departments, schools, and colleges have grown up almost unnoticed. A priceless general library of 150,000 volumes was housed in a building acknowledged to be unequaled at any university in the country, while the great law library of 23,000 volumes was housed in a neighboring building devoted to the needs of a flourishing law school. Large equipments, museums, and collections were on every hand. A total income of over $600,000 was available for the maintenance, if not the extension, of this magnificent plant. Above all there rested the spirit of devotion to the foundation principles of true catholic scholarship,

[1] See Proceedings and Addresses at the Twenty-fifth Anniversary of the opening of Cornell University, Ithaca, 1893.

liberal and practical, planted on that spot twenty-five years before by the founders of the university.

In view of these facts it is no hyperbole to say that the present condition of Cornell University surpasses the most eager hope of its far-seeing founder, or of the young and enthusiastic scholar who dreamed aloud his dreams to that sympathic friend of all high ideals over thirty years ago. The hopes and dreams and aspirations of both have been transmuted into realities. The university which they founded has educated a large body of students, affording to each an opportunity to fit himself for such work as his tastes or talents might incline him to. This it has done freely and unstintingly in the broad and catholic spirit of the founder that it might carry out his great purpose of combining practical and liberal education and of fitting "the youth of the country for the professions, the farms, the mines, the manufactories; for the investigation of science, and for mastering all the practical questions of life with success and honor."

This great growth and important work render very pressing the questions of administration and endowment for the future. There is need for the same wisdom and devotion that have characterized the administration of affairs in the past. Of those who founded and built the university many have passed away and others must soon follow, in the course of nature. Of the trustees named in the charter but one, Alonzo B. Cornell, still sits in the board. Of those first elected under its provisions but one, Andrew D. White, remains. Of the early benefactors the founder, Hiram Sibley, John McGraw, Jennie McGraw-Fiske, Alfred S. Barnes have died in the midst of their labors. Of others who have powerfully aided by their counsels in the development of the university many are also dead, including Horace Greeley, Erastus Brooks, George W. Schuyler, Charles J. Folger, Douglas Boardman, and Henry W. Sage. There remain of those who have helped to direct its destiny from the earliest days only Andrew D. White, Alonzo B. Cornell, Stewart L. Woodford, Henry B. Lord, Francis M. Finch, and a few others. In the future the administration of affairs must pass more and more into new hands and these new questions must be solved by new friends and benefactors.

Fortunately all new questions are half solved in advance of any positive action, for there still remains and must always remain, as the unalterable basis of the university, to which all else must be subservient, those foundation ideas laid firm and deep by Ezra Cornell and Andrew D. White; the close union of liberal and practical education, absolute equality among all, even the most diverse courses of studies, and the adaptation and extension of the privileges built upon this foundation to every person who may ask them and to every need of the age. The history of Cornell University has been the history of the development of these ideas and their translation into the highest forms of usefulness and dignity. Its history for the future, if it

is true to its great mission, will be but the deepening and broadening of the same beneficent purposes.

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1. Public Acts and Documents.

The legislative proceedings relative to the incorporation and endowment of Cornell University may be followed in the journals of the senate and assembly of New York for 1865. For previous proceedings relative to the land grant and the People's College see the journals for 1863 and 1864.

The Cornell University. Speech of Hon. Andrew D. White, in [the] senate [of New York], March, 1865. pp. 8.

The legislation affecting the university may be found in the Revised Statutes of the State and the session laws. All legislation down to 1892 is included in the Laws and Documents relating to Cornell University, published by the university in that year. This publication also contains all public documents relating to the university.

The reports of the comptroller of the State since 1864 are of value in following the history of the land grant and the disposition of the scrip. Mr. Cornell's reports to the comptroller are also of great value.

The relation of the State to the land-scrip fund is decided in the case of The People ex rel. Cornell University *v.* Davenport, comptroller (117 N. Y., 549).

The relation of the State and the university to the Cornell endowment fund and the history of the McGraw-Fiske will contest appear in the decisions in the matter of McGraw (45 Hun., 354; ib., 111 N. Y., 66); Cornell University *v.* Fiske (136 U. S., 152).

The land-grant history is enriched by the "History of the Agricultural College Land Grant of 1862" (Ithaca, 1890, pp. xx, 106), by S. D. Halliday, attorney for the university which grew out of the first case above cited and contains the decision in the case.

The investigation made, at the request of Mr. Cornell, by the legislature of New York in 1873–74 resulted in the three following documents:

State of New York: Senate (1874) Document No. 92. Majority report of the commission to inquire into the college land grant, etc. [Albany, 1874.] pp. 40.

Signed by W. A. Wheeler and John D. Van Buren.

State of New York: Senate (1874) Document No. 93. Minority report of the commission to inquire into the college land grant, etc. [Albany, 1874.] pp. 10.

Signed by Horatio Seymour. It concurs with the majority report in vindicating Mr. Cornell, but differs as to the relation of the State to the Cornell endowment fund.

State of New York: Senate, 1874, Document No. 103. Testimony in investigation of the college land grants, etc. [Albany, 1874.] pp. 498.

2. Histories of the University.

A "Sketch of the beginning of Cornell University" was in 1876 prepared by Vice-President William Channing Russel, to be read before the University Convocation of the State of New York. The paper, if read, never appeared in the printed report of the convocation; but the manuscript of it is in the library of the university, and has been of much use. There did appear, however, in the convocation's report for 1876, under the head of "University necrology," brief sketches, by Vice-President Russel, of Ezra Cornell and of John Stanton Gould.

History of Cornell University in the twenty-five years of its existence, by Prof. Waterman Thomas Hewett, published in "Landmarks of Tompkins County," 1894.

Cornell University: Her general and technical courses. By F. C. Perkins. 1891.

Outside its own publications, the yearly reports of the university to the regents of the University of the State of New York, printed in full or in abstract in the reports of that body to the State legislature, form, perhaps, the most important series of data; but their contents are usually an abridgment of that of the university's own "Register" for the corresponding year.

3. Lives of the Founder.

In Memoriam: The death and burial of Hon. Ezra Cornell, founder of Cornell University. Ithaca, 1874. pp. 40.

Apparently compiled and published by the Ithaca Journal, from whose columns all the contents of the pamphlet are taken.

A memorial address, delivered in Library Hall [Ithaca], January 11, 1875, "Founder's Day." In commemorat of the life and character of Ezra Cornell, founder of the Cornell Univ ty. By Rufus P. Stebbins, pastor of the First Unitarian Church. Ithaca 1875. pp. 34.

Dr. Stebbins was the close personal friend Mr. Cornell, who was an attendant upon his church.

Biography of Ezra Cornell, Founder of the Cornell University. [By Alonzo B. Cornell]. New York, 1884. pp. 322.

The author, late the governor of New York, is the eldest son of Ezra Cornell, and by the charter a trustee of the university. He writes largely from personal observation.

The Life and Services of Ezra Cornell: An address delivered at Cornell University on Founder's Day (January 11, 1887), by Francis M. Finch, judge of the court of appeals of the State of New York. [Ithaca, 1887.] pp. 16.

Judge Finch was one of the earliest and closest associates of Mr. Cornell in the foundation of the university, and for long, as librarian of the Cornell Library in Ithaca, an ex officio trustee.

My Reminiscences of Ezra Cornell: An address delivered before the Cornell University on Founder's Day, January 11, 1890, by Andrew Dickson White, LL. D., L. H. D., first president of the university. Ithaca, 1890. pp. 42.

4. Publications of the University.

(Of the manifold publications of the university, only those are here chronicled which are of the first importance to the student of its general history.)

Report of the committee on organization, presented to the trustees of the Cornell University October 21, 1866. Albany, 1867. pp. 48.

Signed, for the committee, by Andrew D. White, who was the chief author of the report.

The Cornell University: First general announcement. [Albany, 1867.] pp. 19.

A second edition, printed in the spring of 1868, has a list of the professors already appointed, with biographical notices of them.

The Cornell University: Second general announcement. Albany, 1868.

A second edition, with additions (pp. 27), was issued in the same year. The same pamphlet was also published under the title of "Circular to school commissioners, city superintendents, and supervisors," a circular of the State superintendent of public instruction being prefixed to this second edition. A four-page supplement to the second general announcement, containing courses of study and conditions of admission, was later published.

The Cornell University: Account of the proceedings at the inauguration, October 7, 1868. Ithaca, 1869. pp. 37.

The Cornell University Register. Yearly. 1868 to the present. 27 vols.

The annual catalogue of the university. The first issue bore the title of "Catalogue of the officers and students of the Cornell University for the academic year 1868-69," etc., but it was followed by a "Register" in the same year. Since 1886 the Register has been supplemented by the "Annual announcement of the School of Law," and annual announcements are issued by some other schools.

The Ten-Year Book of the Cornell University. Decennially. 1878, 1888, 1898. 2 vols.

A catalogue of the officers and matriculates of the university, with biographical statistics of its graduates. Compiled by the librarian of the university.

Reports of the President. Yearly. 1880–81, 1882–83, to the present. 17 vols.

The report for 1881–82 was not published. Appended, in full or in abstract, have usually been the reports of heads of departments and colleges to the president.

Reports of the Treasurer.

In some years these reports are bound up with the reports of the president, but of late they have been printed separately.

The Library Bulletin of Cornell University; edited by the librarian. 1882 to 1896. 3 vols.

Appearing at irregular intervals and devoted mainly to the additions to the library, but containing lists of the publications of professors and many notes of importance for the history of the library. Since 1896 the list of publications by professors has appeared as an appendix to the president's report.

Laws and Documents Relating to the Cornell University. Ithaca, 1870, pp. 91; 1883, pp. 161; 1892, pp. 234. 3 vols.

Certain regulations proposed for the Cornell University. Ithaca, 1870. pp. 8.

Report submitted to the trustees of Cornell University in behalf of a majority of the committee on Mr. Sage's proposal to endow a college for women. By Andrew D. White, chairman of the committee. Ithaca, 1872. pp. 40.

The Cornell University: What it is and what it is not. Ithaca, 1872. pp. 30.

By President White.

Proceedings at the laying of the corner stone of the Sage College of the [Cornell] University, May 15, 1873; [with the] report to the trustees on the establishment of said college. Ithaca, 1873. pp. 134.

Of importance as regards the admission of women to the university.

Proceedings at the unveiling of the portrait of the Hon. Justin S. Morrill, . . . June 20, 1883. Ithaca, 1884. With portrait.

The addresses of President White and of Senator Morrill are of historical value.

Letter of Andrew Dickson White, LL. D., resigning the presidency of Cornell University. Ithaca, 1885. pp. 8.

Cornell University: Proceedings in memory of Louis Agassiz, and in honor of Hiram Sibley. Commencement week, 1885. Ithaca, 1885.

The Presidency of Cornell University: Remarks of Andrew Dickson White, presented in accordance with the request of the trustees that he would address them regarding the election of his successor. Ithaca, 1885. pp. 28.

Proceedings and addresses at the inauguration of Charles Kendall Adams, LL. D., to the presidency of Cornell University, November 19, 1885. Ithaca, 1886. pp. 77.

Cornell University: Report of a special committee on the establishment of a department of law, together with a preliminary announcement of the action of the trustees in establishing such a department. Ithaca, 1886. pp. 28.

Cornell University: Its significance and its scope. An address, . . . 1886, by Charles Kendall Adams, LL. D., president of the University. Ithaca, 1886. pp. 19.

Cornell University: Report of the executive committee on the reorganization of the department of history and political science, adopted January 18, 1887. Also, a letter from ex-President White, offering as a gift to Cornell University his library of works on history and political science, and the action of the trustees accepting the same and reorganizing the department. [Ithaca, 1887.] pp. 8.

A People's University: An address delivered before the Cornell University on Founder's Day, January 11, 1888, by J. G. Schurman, professor of philosophy. Ithaca, 1888. pp. 32.

Exercises at the dedication of Barnes Hall, June 16, 1889. Ithaca, 1889. pp. 39.

Exercises and addresses at the laying of the corner stone of the University Library Building, October 30, 1889. Ithaca, 1889. pp. 32.

Proceedings of the board of trustees of Cornell University, including the minutes of the executive committee, July 21, 1885–July 22, 1890. Ithaca, 1890. pp. 387.

Ibid., 1890.

Proceedings and addresses at the inauguration of Jacob Gould Schurman, LL. D., to the presidency of Cornell University, November 11, 1892. Ithaca, 1892. pp. 81.

Proceedings and addresses at the twenty-fifth anniversary of the opening of Cornell University. [Edited by Prof. George L. Burr.] Ithaca, 1893.

Memorial exercises in honor of Henry Williams Sage. [Held Feb. 22, 1898.] Ithaca, 1898. pp. 80.

A Generation of Cornell, being the address given June 16, 1898, at the thirtieth annual commencement, by Jacob G. Schurman, president of the university. New York, 1898. pp. 58.

5. Alumni Publications.

Proceedings of the associate alumni of Cornell University. Yearly. 1884 to the present.

Reports of the alumni trustees to the alumni of Cornell University. Yearly. 1884, 1886, to the present. 12 vols.

Since 1887 this report, made in obedience to the resolution of the alumni, that the university trustee "last elected by the alumni, at the end of the first year of his office, make a report on the condition and needs of the university," has been included in the "proceedings of the associate alumni." The reports are as follows: 1884, James Fraser Gluck; 1886, George R. Van De Water; 1887, Mynderse Van Cleef; 1888, David S. Jordan; 1889, Daniel E. Salmon; 1890, Frank H. Hiscock; 1891, Walter C. Kerr; 1892, Robert H. Treman; 1893, George B. Turner; 1894, Charles S. Francis; 1895, ——; 1896, Daniel E. Salmon; 1897, ——; 1898, Jared T. Weidman.

Petition of the alumni of Cornell University in opposition to honorary degrees, presented to the board of trustees Wednesday, October 27, 1886. Ithaca, 1886. pp. 13.

6. Undergraduate Publications.

The Cornell Era. Weekly. 1868 to the present. 30 vols.

The Cornellian. Yearly. 1868 to the present. 30 vols.

An illustrated annual, published under the varying title of Cornelian or Cornellian, at first by the secret fraternities of the University, then (since 1883) by the successive junior classes. In 1877 and again in 1878 both a Cornelian and a Cornellian appeared.

The Cornell Times. Weekly. 1873–74. 1 vol.

The Cornell Review. Monthly. 1873–1886. 13 vols.

Cocagne. Fortnightly. 1878 (April–June). 6 numbers. An illustrated satirical publication.

The Cornell Daily Sun. 1880 to the present. 18 vols.

The Association Bulletin; published by the Cornell University Christian Association. Monthly. 1886 to 1896. 11 vols.

The Cornell Magazine. Monthly. 1888 to the present. 10 vols.

The Widow. 1894 to the present. 4 vols.

An illustrated satirical biweekly.

The Crank: Published . . . by the students of the Sibley College of the Cornell University . . . representing the interests of the mechanical and electrical engineers. Monthly. 1887–1890. 4 vols. The Sibley Journal of Engineering (formerly the Crank). 1890 to the present. In all, 12 vols.

The New York Law Review. 1895. A monthly periodical published by members of the school of law. 1 vol.

7. Guidebooks and Descriptions.

The Cornell University. The university guide. Ithaca, 1870. pp. 31.

By Prof. Willard Fiske.

Guidebook of the Ithaca gorge and its surroundings. By William G. Johnson. Ithaca, 1873. pp. 58.

The University Guide: Containing an account of the buildings and collections of Cornell University. Ithaca, 1875. pp. 61.

Students' handbook. Yearly. 1885 to the present.

A descriptive guide for new students, revised and published annually by the Christian Association of Cornell University.

In and out of Ithaca: A description of the village, the surrounding scenery, and Cornell University. By C. H. Thurber [registrar of the university.] Ithaca, 1887.

8. Miscellaneous.

The more important of the numerous magazine articles which have been devoted to Cornell University can readily be found by the aid of Poole's Index. Of cyclopedia articles, those in Appleton's American Cyclopedia, in Johnson's Universal Cyclopedia, and in Stoddart's Encyclopedia Americana, being written by officers of the university, have a quasi official authority.

SYRACUSE UNIVERSITY, 1870.

[Furnished by the university.]

Genesee College was founded at Lima, N. Y., in 1851, and for twenty years its work was carried on at that place. In 1871, in response to a demand for a more central location, its grounds and buildings were abandoned to the Genesee Wesleyan Seminary. The college was transferred to Syracuse and reopened under the name of the College of Liberal Arts of Syracuse University. In 1872 the Geneva Medical College, chartered in 1834, was also transferred to the same city. One year later a College of Fine Arts was organized, and these three colleges at present constitute the university. The charter, however, provides for departments in theology, law, industrial arts, and letters whenever it shall be deemed expedient.

COLLEGE OF LIBERAL ARTS.

Three courses of study are at present provided in the College of Liberal Arts.

The classical course is substantially the same as is pursued in the best American colleges, including a considerable amount of modern languages.

The Latin scientific course is nearly identical with the classical, except in the substitution of German and other subjects for the Greek.

The scientific course, in the place of Latin and Greek, substitutes German and French and some additional studies in mathematics, natural sciences, literature, history, and philosophy.

In the junior year nearly one-third of the student's time is devoted to elective work. In the senior year the range of election is somewhat larger.

MEDICAL COLLEGE.

The Medical College is one of the few that require a graded course of instruction instead of simple attendance upon lectures with the accompanying examinations.

The course of instruction extends over a period of three years, and consists of lectures, recitations, practical work in the laboratories and dissecting room, together with clinical exercises, etc. The division of the work is as follows:

First year: Anatomy, physiology, chemistry, histology, botany, and applied anatomy.

Second year: Anatomy, physiology, medical chemistry, materia medica, practice, surgery, and clinics.

Third year: Therapeutics, practice, surgery, obstetrics, pediatrics, pathology, gynæcology, forensic and State medicine, ophthalmology, dermatology, and clinics.

First-year students receive practical instruction in chemistry, with a course of laboratory work extending through both terms. Second-year students take a shorter course in purely medical chemistry.

Laboratories have also been established for practical work in histology and comparative and human anatomy.

COLLEGE OF FINE ARTS

In the college of fine arts three courses of instruction only have been organized. It is intended that the scope of this college shall ultimately include instruction in all the fine arts, that is:

1. The formative arts: Architecture, sculpture, painting, engraving, and the various forms of industrial art; and

2. The phonetic arts: Music, oratory, poetry, and belles-lettres literature.

Candidates for admission to the course in architecture are examined in English grammar, geography, American history, arithmetic, natural philosophy, algebra as far as to the calculus of radicals, plane geometry, and free-hand drawing, sufficient to represent the progress usually made by students in at least one year of thorough and systematic study.

Candidates for admission to the course in painting are examined in English grammar, geography, American history, arithmetic, natural philosophy, and free-hand drawing sufficient to represent the progress usually made in at least two years of thorough and systematic study.

Candidates for admission to the course in music are examined in the same studies as for the course in painting, with the exception that two years of thorough and sytematic study in music replace the two years in drawing.

The courses in architecture and painting include systematic and progressive instruction in the theory, the history, and the practice of architecture and painting, and in those branches of mathematics, natural science, history, language, and philosophy which bear most intimately and directly upon these arts, and without a knowledge of which success in the higher domain of art is impossible.

It is the aim to develop the talents of the students in such a way that each student shall retain his individuality of character and manner, and not to mold after the same arbitrary method.

The course in music includes systematic and progressive instruction in the the theory, history, and practice of music, and is arranged with a view to enable the student to become an accomplished musician.

Other instruments, as the violin, viola, violoncello, cornet, or clarionet, may be substituted for the piano after the freshman year; the organ after the sophomore year.

Vocal instruction may take the place of instrumental after the sophomore year.

The study of vocal music for one year is required of all who propose to graduate in the course of music.

Various accessory branches of study are introduced, which have a more or less intimate connection with the art of music, and which

also have a relation to general liberal culture. These are hygiene, physics, elocution, rhetoric, English literature; the French, German, and Italian languages; ancient, mediæval, and modern history, and the history of civilization; the science of esthetics, and the general history of the fine arts.

Opportunity is given to advanced students, who are fully qualified to do so, to assist in instructing the preliminary classes in music, for the purpose of giving pedagogic experience under the supervision of the faculty.

Persons completing the course in architecture receive the degree of bachelor of architecture; the course in painting, the degree of bachelor of painting; the course in music, that of bachelor of music; special students may receive certificates of progress and proficiency.

THE HIGHER DEGREES.

It has been the policy of the university, in order to promote systematic and thorough culture, to confer the master's degree and the degree of doctor of philosophy upon any bachelor of arts, of science, or of philosophy who shall comply with the following conditions: Courses of study have been outlined in English literature, mathematics, Greek, Latin, modern languages, philosophy, evidences of Christianity, chemistry, physical science, esthetics and history of the fine arts, history, botany, zoology, and geology. Any three of the groups or units designated by the Roman numerals, I, II, III, etc., provided they are selected from the same department, is regarded as one year's study. On passing a satisfactory examination therein, the candidate is entitled to the second degree; i. e., a bachelor of science, of philosophy, or of arts is entitled to the corresponding master's degree. After satisfactory examination on another year's course of study, selected as before explained, the degree of Ph. D. is conferred. These degrees are offered to none but regular graduates of colleges, and the master's degree conferred in cursu or causa honoris is accepted as a substitute for the first year's post-graduate study. In this university a study of Latin equivalent to four books of Cæsar is requisite for the degree of B. S., and the higher degrees are not conferred upon any who are not thus qualified.

The candidate appears at the university for examination, and presents and defends a thesis of not less than 4,000 words on some subject connected with the course of study pursued. Examinations upon the work of the two years may be taken at one time, or in two sections—each covering the work of one year—as may be desired; but examinations are not given upon smaller fractions of the course.

The degree of doctor of philosophy is not conferred except upon these conditions, and the master's degree is no longer given causa honoris.

GOVERNMENT.

The university is governed by a board of trustees consisting of not less than 20 nor more than 45 members. All matters of administration in which more than one college is interested are in charge of a senate, consisting of two trustees, the chancellor, the deans of the several colleges, two members of the faculty of liberal arts and one from each of the other faculties. The decisions of this senate are binding in the absence of any instructions from the trustees. Each faculty is supreme in its own department, not having power, however, to alter the courses of study without the approval of the senate, but, with its dean, having complete control of all matters of administration and discipline. The chancellor is a member of the board of trustees and of each of the faculties, and any professor of any college having students from another college has a voice in its faculty on all matters pertaining to his work.

BUILDING.

The campus of 50 acres is beautifully situated in the southeast part of the city, and commands a view of the city and lake and the surrounding country for many miles. The corner stone of the first building was laid August 31, 1871. It is a handsome cut limestone structure 180 by 96 feet, four stories in height. It contains the recitation rooms, museums, laboratories, and chapel of the liberal art college. In 1887 Mr. E. F. Holden, a member of the board of trustees, built and presented to the university an astronomical observatory. It is built of rock-faced gray limestone, and equipped with an 8-inch Alvin Clark telescope, a 3-inch reversible transit, by Troughton & Sims, chronograph clock, chronometer, micrometer, etc. It is also provided with meteorological instruments. The library building, a fireproof structure three stories high, 80 by 90 feet, built of Trenton pressed brick, was completed in June, 1889. It is provided with abundant rooms and all needed appliances, and has a capacity for 135,000 volumes. The John Crouse Memorial College edifice, built and furnished by the late Mr. John Crouse and his son, Mr. D. Edgar Crouse, is of Long Meadow red sandstone, with granite foundation. It is four stories high, 162 by 190 feet in extreme dimensions, and is one of the most imposing of college structures. The college of fine arts is in this building.

The buildings of the medical department are eligibly located on Orange street, nearly in the center of the city, but a short distance from the hospitals and dispensary. They consist of a large brick edifice, in which are the various lecture rooms, histological and pathological laboratories, museum, etc. The amphitheater is spacious, capable of seating one hundred or more students, well lighted and heated, and furnished with all the necessary appliances for properly presenting the various subjects demonstrated or lectured upon. The

amphitheater, as well as the other lecture and recitation rooms in the main building, have additional rooms or cabinets connecting with them in which special dissections are made, and where the various preparations in use are arranged for presentation to the classes. These rooms are provided with running water and such other conveniences as may be needed. In the rear of the main building is the chemical laboratory and dissecting room.

LIBRARIES AND SCIENTIFIC COLLECTIONS.

The general college library contains about 35,000 volumes, and is open to students daily. It is in charge of a competent librarian. Several large funds at present charged with life annuities will be at the disposal of the university for increasing its library facilities at the death of the donors.

In April, 1887, the great historical library of Leopold Von Ranke was purchased by Mrs. Dr. John M. Reid and presented to Syracuse University. This is almost invaluable to the student of modern history. The library of the Geneva College of Medicine, with the additions which have since been made to it, is at the service of students in medicine. So soon as necessary room is provided the college will come into possession of the extensive and valuable medical library collected by N. C. Husted, M. D., LL. D., of Tarrytown, N. Y.

As a nucleus to a library of the fine arts, valuable books and periodicals have already been gathered, to which additions will be made from time to time, as circumstances shall permit. Several of the most important art journals are provided in the reading room. The college of liberal arts possesses for illustrating natural science the following collections:

1. The Ward series of casts of fossil remains.
2. An extensive lithologic collection representing all the leading types of rocks.
3. A collection of fossils illustrating especially the palæontology of New York State.
4. The "Cooper collection" of quartz and its varieties.

In zoology are:

1. The "Banks collection" of North American birds.
2. A considerable collection of alcoholic specimens, mostly of invertebrates.
3. A collection of shells with abundant representation of nearly all molluscan families.
4. A collection of insects.

In botany, a well-ordered herbarium of about 8,000 specimens is accessible to students.

The laboratories are also kept supplied with an abundance of material for class use.

The college of medicine has an excellent museum, extensive in the

department of pathology, and amply provided with the means of illustration of the materia medica.

For the use of students in painting, the college of fine arts has several thousand photographs, engravings, and chromo lithographs, and a good collection of plaster casts procured several years ago. To these have been added in the last year a very fine collection of casts presented by a friend in New York, and the celebrated Wolff collection of engravings, containing 12,000 sheets of rare and costly etchings and engravings representing the great masters of the art in all ages. This great collection was the gift of Mrs. Harriet Leavenworth, of Syracuse, in April, 1889.

Special facilities for the study of the masters of the organ are afforded.

The university has two pipe organs, which are employed for instruction and practice. The one in the large hall of the John Crouse Memorial building, built by Frank Roosevelt, is perhaps unsurpassed in perfection and completeness by any organ in America. The one in the university chapel, built by Johnson & Son, though smaller and of less range, is of most excellent quality.

PROPERTY, ETC.

From its foundation the university has been coeducational, and young women and young men have been admitted to its classes on an equal footing. It does not provide rooms or board for its students, but they are responsible, like other citizens, to the laws and ordinances of the city. The income is derived from tuition receipts and productive endowment funds. The net value of its property in 1890 was about $1,792,655. The number of students in 1889–90 was 575 exclusive of those pursuing post-graduate courses of study. Since its foundation 783 have taken the bachelor's degree, and 98 the degree of doctor of philosophy.

FACULTY.

The following have been prominent members of its faculty: Joseph Cummings, afterwards president of Northwestern University, Evanston, Ill.; John M. Reid, secretary of missionary society of the Methodist Episcopal Church; William Wells, professor of modern languages of Union College; S. A. Lattimore, professor of chemistry in Rochester University; Alexander Winchell, of Michigan University, and E. O. Haven, late bishop of the Methodist Episcopal Church.

PUBLICATIONS.

Announcement of Syracuse University, 1871, 16 pages.
Annuals from 1872 to 1890, inclusive.
Announcements of College of Medicine, 1872 to 1890.
Manual of College of Fine Arts, 1874, 1875, 1882.
Post-Graduate Courses of Study, 1876, 1878, 1883, 1884, 1886, 1889.

Syracuse University: Inauguration and Corner Stone, 1871, pp. 40.
Inauguration of Alexander Winchell as Chancellor of Syracuse University, pp. 79.
Bulletin of Biological Laboratory No. 1: List of Birds of Onondaga County, by Morgan K. Barnum. No. 1, pp. 34.
Syracusæan [Student Annual], 1877, 1878, 1879, 1880, 1881.
Onondagan [Student Annual], 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890.
University Herald, Monthly, Vol. I-XVIII, 1872–1890.
Syracusan, Monthly, Vol. I-XII, 1877–1890.
University News, Weekly, Vol. I-III, 1888–1890.
Annual Report to Board of Trustees, 1874, by Alexander Winchell, pp. 17.
Address to Members of Conference of the M. E. Church in New York, 1875, by Chancellor Haven, pp. 4.
Statement of Syracuse University, 1878, Chancellor Haven, pp. 12.
Charter and By-Laws of Syracuse University, 1887.
Statement of Syracuse University, 1884, by Chancellor Sims.
Alumni Record of Syracuse University, 1872–1886, including Genesee College, 1852–1871, and Geneva Medical College, 1835–1872. Prepared by J. H. Tartman, '78; C. W. Winchester, '67; L. M. Underwood, '77.

ST. JOHN'S COLLEGE, 1871, BROOKLYN.

This college was incorporated in 1871 under the general law for the formation of benevolent, charitable, scientific, and missionary societies. It is under the control of the Roman Catholic Church, and maintains a theological as well as a collegiate department.

The president of the institution is the Very Rev. J. A. Hartnett, C. M., and the faculty comprises eleven members. The number of students in 1896 was 109 and the net value of its property about $400,000.

ST. BONAVENTURE'S COLLEGE, 1875, ALLEGANY.

This is a college in the hands of the "Brothers of the minor order of St. Francis, who are vowed to poverty and devoted to education." Beyond a bare support they draw nothing from the funds of the college. The order insures to the college a perpetual succession of competent teachers.[1] It was founded as an academy in 1859, and given a conditional charter by the regents in 1875, which charter was made absolute January 11, 1883. Allegany, in Cattaraugus County, is the seat of the college. Its reports to the regents are very meager, and few facts as to the value of its property can be given. The total income in the year 1888–89 was $33,600, of which $30,500 was from tuition fees. It is under the presidency of the Very Rev. Joseph Butler, O. S. F., who has a force of 20 instructors. The students number 103. The courses of study are four—commercial, scientific, classical, and ecclesiastical.

[1] Reports of January 11, 1881, of committee of regents on question of granting full charter, quoted in Hist. and Stat. Rec., p. 340.

CANISIUS COLLEGE, 1883, BUFFALO.

Canisius College is of recent origin. The only trustworthy information obtainable concerning it is to be found in the historical and statistical record of the regents, 1885:

Canisius College is located in Buffalo and conducted by the members of the Society of Jesus. It was incorporated (by the regents) without provisional requirements January 11, 1883. In the report made by the committee at the time of granting a charter it is stated that the buildings are very extensive and admirably adapted to the uses of the college. Its library and philosophical apparatus are good, and the revenues abundant for its uses. The property with which it was proposed to endow the college was estimated to be worth $240,600 by fair and competent judges.

A few more facts in regard to the history of the college can be found in the regents' annual reports.

It is under the direction of Rev. John I. Zahm, S. J. There are 30 instructors and 62 students; the course is of three years' duration, the sophomore year of the usual college course having been omitted.

THE NIAGARA UNIVERSITY, 1883.

Is under the auspices of the Congregation of the Mission. It was incorporated by the regents in 1883, and consists of three distinct departments—the Seminary of our Lady of the Angels, at Suspension Bridge, and the law school and the medical school in Buffalo.

The chancellor of the university is the Very Rev. Patrick MacHale, C. M., D. D.

STATISTICS OF STUDENTS AND INSTRUCTORS.

Department of Arts:	
Students of college grade	86
Instructors	9

The instructors receive no compensation for their services except that required by the rules of the order.

The net property amounts to $187,560.

ST. FRANCIS COLLEGE, 1884, BROOKLYN.

[Prepared by order of the president, Brother Jerome.]

St. Francis College was founded in 1859, incorporated in 1868, and chartered in 1884. It occupies commodious and well-arranged premises at 300 to 312 Baltic street and 29 to 33 and 37 to 47 Butler street, near Court street, Brooklyn. It has a frontage of 175 feet on each street. The buildings are five stories high, with a fine court between them adorned with lawns, fountains, shade trees, and flower beds. The president, vice-president, and, generally speaking, the majority

of the staff belong to the Franciscan Order, but eminent lay help is promptly secured whenever death or any other inevitable mishap leaves a void in the ranks of the religious. As a rule, the lives of the latter are so uneventful as not to be interesting to the general reader, and they all die with the wish expressed or implied that the record of their services should be entombed with their bodies. This is true, in a special manner, of the religious order of which Francis of Assisi was the founder. We could give several names of the past and present of high distinction in the different departments of our collegiate programme, and of some who have made a mark in English literature, but in deference to well-known modesty we shall refrain from making them public.

The fortune of the college, financially speaking, has varied with the times, but the attendance has been always very respectable and remarkably steady from entrance into any of the classes to the commencement evenings, when the names of graduates are announced. A general average of attendance struck for the past twenty years might be put down at 360, including boarders and day scholars. The attachment of alumni and students to the college and its traditions has become a household word in Brooklyn. The entertainments given by the literary unions in connection with the college and the several commencement exercises have won unstinted praise from the press and public audiences.

The course of studies embraces English literature, rhetoric, poetry, elocution, history, geography, phonography, and science of accounts; mathematics; the physical sciences—natural philosophy, chemistry, outlines of physiology, botany, zoology, and geology; the Greek and Latin, French and German languages. The educational programme has been gradually extended, comprising at present every branch required for entering first-class universities and any department of professional studies or mercantile pursuits. The library of the college has 1,500 volumes of the very choicest selection in literature, science, and art. Many of the graduates of the college have acquired a high reputation in different walks of life. The college is extensively represented in the Catholic priesthood throughout the diocese of Brooklyn and in other dioceses of the United States adopted by its graduates. It has also a large and distinguished showing in the legal and medical professions, and its alumni are found in some of the foremost mercantile firms of Brooklyn and the neighboring cities. Our commercial department is entirely separate from the classical, scientific, and philosophical. We have not as yet been pained with the report of a failure on the part of students who received diplomas from this department.

Brother Jerome, president of the college, has from its infancy watched over its destinies and largely shaped its programme and progress. He has been ably assisted by many talented members of a

religious body of teachers whose numbers and sphere of usefulness are annually extending. Nearly every section of the United States is represented in our classes, and we have had for some years quite a number of students from Mexico and the States of Central America.

POLYTECHNIC INSTITUTE OF BROOKLYN, 1890.

FOUNDATION.

The Polytechnic Institute of Brooklyn, incorporated under the laws of the State of New York, is the completed reorganization and outgrowth of the former Brooklyn Collegiate and Polytechnic Institute. Its origin dates from the foundation of that institution, which was incorporated by the board of regents as an academy in April, 1854.

Its curriculum, at first preparatory, in the main, for college and for business pursuits, was steadily enlarged and extended, until, by the year 1870, two courses of study had been provided, leading, respectively, to the degrees of bachelor of science and bachelor of arts.

Its powers under the academic charter and its equipment were found inadequate for advanced work, and it was finally determined to procure a new charter with wider powers. In January, 1890, a college charter was granted by the regents to this institution under the name of the Polytechnic Institute of Brooklyn.

DEPARTMENTS.

The educational institution as now established comprises two general departments, viz, the institute and the academic department.

THE INSTITUTE.

The institute comprehends all the higher educational work. It provides at present in its various departments of instruction four-year courses of study, equivalent in all respects to like courses in colleges and technological schools leading to the bachelor's degree. The conditions for admission correspond generally to those for entrance into the freshman class of the leading schools of science and arts. The institute courses are, however, specially arranged to secure a continuity and progression in the advanced branches of those courses of study which are begun in the academic department of the institution.

THE ACADEMIC DEPARTMENT.

The academic department comprises the preparatory courses of the institute and all work lower in grade than that conducted in the institute.

Its courses are designed to prepare students thoroughly for entrance into the institute or for admission into any of the colleges. It provides also for students not intending to pursue a college or technical

course, but who desire to fit themselves for mercantile life, a course of instruction specially designed for this end.

The president of this institution is David H. Cochran, Ph. D., LL. D.

(From "The Polytechnic Institute of Brooklyn. Retrospect and Outlook." Issued by the corporation, Brooklyn, 1890.)

KEUKA COLLEGE, 1890.

This institution, situated at Keuka, in Yates County, was granted a provisional charter by the regents in 1890, but surrendered it in 1895, not having attained the requirements for an absolute collegiate charter.

The following minute of the proceedings of the regents appears in the report of the secretary for 1897, page 173:

Keuka College.—The request of the trustees of Keuka College, that its provisional charter be made absolute, was submitted with the reports of the head inspector as to its financial and educational condition.

Voted, That the secretary notify the trustees that the institution does not meet the minimum requirements of ordinance 5 for college rank, and that therefore an absolute college charter can not be granted; but that in view of all the facts the regents have extended the provisional charter for three years in order to allow ample opportunity to meet the minimum conditions of the ordinances for a full college charter. (November 4, 1897.)

PROTESTANT COLLEGE AT SAO PAULO, 1891.

Chartered by New York legislature in 1891. Located at Sao Paulo, Brazil. Its history not within the scope of this volume.

CHRISTIAN COLLEGE IN CHINA, 1893.

Incorporated by the regents in December, 1893, and located at Canton, China.

ADELPHIA COLLEGE, 1896, BROOKLYN.

This college was incorporated by the regents June 24, 1896, and began organized work in the fall of that year.

CHAPTER 6.

UNIVERSITIES AND COLLEGES FOR WOMEN.

FIRST EFFORTS TOWARD THE HIGHER EDUCATION OF WOMEN IN NEW YORK STATE.

New York has reason to be proud of the part it has taken in solving the knotty problem of woman's education. Before the Boston Latin School had generously offered instruction to girls in summer, when the boys did not want to come; before Oberlin's audacious experiment in graduating women in the same class with men; long before the days of Mount Holyoke and Elmira and Vassar, an attempt was made in eastern New York to secure for women a higher standard of education. It was made by a remarkable woman, Mrs. Emma Willard, whose name the college woman of to-day delights to honor.

Mrs. Willard was the preceptress of a girls' school which she had established in 1814 at Middlebury, Vt. This seminary she moved to Waterford, N. Y., in 1819, hoping that the generosity of New York State toward the education of men might be extended to the education of women. With this hope she made, in 1819, an application to the legislature for aid, accompanying her petition with a "Plan for female education." In spite of the fact that Governor De Witt Clinton, in his annual message, strongly supported the application, and in spite of the masterly character of the plan itself, the legislature did not respond.

Mrs. Willard then set to work to accomplish her purpose by other means. She elaborated the courses of study in her own school. This in 1821 was moved to Troy, and became known as the "Troy Female Seminary." Here Mrs. Willard worked until 1838. Finding the existing text-books inadequate in some departments of instruction, she attempted to supply the deficiency. It is said that she was the first to introduce the study of map drawing into schools. She prepared charts for historical and geographical study, for which she was awarded a gold medal at the World's Fair in London in 1851. The work in English at this seminary was of an unusually high character.

Many successful teachers have been sent out from this institution, which is still engaged in active work. Mrs. Willard severed her connection with it in 1838, leaving it in the hands of her son. She died in 1870, in the 84th year of her age.

Mrs. Willard's attempt to gain the cooperation of the legislature in carrying out her plans was a failure. But it may be that her prac-

tical demonstration of the fact that a woman can obtain a thoroughly scholarly education largely by her own efforts and can spend her life in imparting it to others without the loss of either health or womanliness went far toward gaining from the legislature the charter of Elmira College in 1855 and of Vassar in 1861.

It is certain that her demonstrated success stimulated the establishment of similar "female" seminaries in all parts of the country, and thus helped to create a demand for an education equal to that offered by the colleges for men.

ELMIRA COLLEGE, 1855.

[Sketch furnished by President VAN NORDEN.]

Elmira College was opened in 1855. The site chosen was on the highest terrace of the Chemung, in the center of the beautiful and fertile intervale, girt about with hills, on which is built the flourishing city of the same name. Here, in a region exceptionally blessed in natural resources, with the "garden of America" to the north and the most prolific coal-oil and gas area in the world to the south and west, a region sure in time to become densely populated and very wealthy, it was resolved to carry out to logical conclusion previous tentative movements in the direction of the higher education of women; and here the very first real experiment in subjecting young girls to the tests of the best colleges for men was boldly ventured.

THE FIRST WOMAN'S COLLEGE.

The founding of Elmira College marked the commencement of a new era in the higher education of women. The quarter century immediately preceding had witnessed noble and successful efforts in establishing female seminaries, some of which were of great excellence and high grade. These mainly depended upon the personality of their proprietors, chiefly women, whose high character and executive skill gave them deserved success. It was, however, impossible to transfer to successors the personal influence, affection of pupils, and educational skill which gained the well-earned reputation of the founders, who, in many instances, after a period of successful labor, retired with a handsome fortune, leaving the seminary as a new business enterprise to some one else. There was no accumulation of educational forces, no conservation of what had been gained, no expectation of permanence and increased value.

MOTIVES FOR THE ESTABLISHMENT OF THE COLLEGE.

The success of the female seminaries, limited as it necessarily was, at least challenged thoughtfulness on the possibilities of expansion. Good and wise men agreed that the aptitudes and facilities of the minds of women had not been exhaustively cultivated, and that the experiment of a higher education need not be faithlessly attempted.

THE COLLEGE GROUNDS.

ELMIRA COLLEGE.

It was also believed that the associated college life, with its varied friendships, its class feeling, its society intimacies, and its loyal love for alma mater might be of very great value in the education of women. Of course, college life for women must be purified from the objectionable elements so common in our colleges for men. It was believed to be possible to furnish an almost ideal home life in a well-regulated Christian college for women, which might be and ought to be a constant training in self-control, spontaneous kindness, and mutual helpfulness. College life might be the best preparation for a future home life, for Christian social life, and for church life for young women, and also a superior professional preparation for the highest positions as teachers.

Such was, in general principles, the ideal before the minds of those who resolved to take the next step upward, from the highest and best female seminaries, of which "the Troy" and "Mount Holyoke" were types, to a true college for women. The name female college was even then becoming common at the South and West, but in no instance, so far as we can learn, did it signify a required course of study higher than that of Troy or Mount Holyoke, although to a few were granted the legal right to confer degrees. Among these were the female college at Macon, Ga., and the Wesleyan Female College at Cincinnati. Almost all grades of seminaries and joint-stock institutions adopted the title "female college," and this has been a serious obstacle in the way of the recognition of the true rank of "Elmira."

FIRST STEPS TOWARD ORGANIZATION.

In the year 1851 a number of distinguished ministers and laymen met in Albany to consider the matter of establishing a real college for women, in advance of the best female seminaries, designed to furnish a much higher systematic education, with the best methods of instruction, by a college faculty, with permanent organization into special departments, and with endowments which should secure a continued and increasing growth, with a permanent place and honorable rank among the most valuable and distinguished educational institutions of the country. After careful consideration it was resolved to establish such a college somewhere in the State of New York.

In the following year, 1852, a charter was obtained locating the institution at Auburn, with the title Auburn Female University, with an able board of trustees from all parts of the State and representing the various Christian denominations. A financial secretary was put into the field to gather subscriptions and enlist the Christian public in this new institution. This secretary was Rev. Harvey A. Sackett, whose wife, Mrs. D. E. Sackett, had been prominent among a noble band of Christian teachers in New England and New York who were earnestly devoted to the uplifting of the standard of education for women and had established a number of very superior seminaries.

Prominent among these were the seminaries in Utica, Geneva, Canandaigua, and Leroy. It was principally due to Mrs. Sackett and her husband that the idea of founding a college for women was brought to the special attention of the gentlemen who held their first conference on this subject in the consistory room of the Second Reformed Dutch Church of Albany. Dr. Wyckoff, Hon. Amos Dean, and Hon. Luther Tucker, of Albany; Dr. Beman, of Troy; Dr. Mandeville, of Hamilton College; Dr. Hickok, of Auburn; Dr. Hogarth and Professor Boyd, of Geneva; Dr. Kendrick, of Rochester, and other prominent educators gave the enterprise their hearty approval and cooperation, and actively served on the board of trustees.

CHARTER.

Great difficulty was encountered in raising funds. The new era of large donations had not yet come. With an encouraging prospect of pecuniary help from Elmira, the question of location was reconsidered and the proposed institution transferred from Auburn to Elmira in 1853, and rechartered in 1855 as the Elmira Female College. Mr. Simeon Benjamin, an elder in the First Presbyterian Church, became warmly interested in the enterprise. He became chairman of the board of trustees and also treasurer of the college, and by his able financial management, and generous advances and gifts of much needed funds at critical times, he gained for the college its secure though moderate pecuniary success, and left a generous legacy upon condition that the synod would take the college under its care. The donations and legacy of Mr. Benjamin, extending through the first ten years of the college history, amounted to the sum of $80,000. During this period the college also received from the legislature $35,000, from the Maxwell brothers, Geneva, $10,000, and more recently from the Marquand estate, $25,000, and from local subscriptions at various times $50,000. But this all came so slowly that the college has always labored under great difficulty in putting itself in favorable, attractive comparison with the new colleges for women which began with abundant means, and which have never felt need of economy.

Elmira College has been compelled by comparatively limited means, as well as by conscientious principle, to offer excellence of instruction and the best possible training of the personal character of students as its most important attractions and elements of value, so that while waiting anxiously for donations and legacies it might become more clear that the college was unquestionably worthy of them and would surely make the best possible use of them. Two figures have been very prominent in the history of its faculty.

PRESIDENCY OF DR. COWLES.

Rev. Augustus W. Cowles, D. D., LL. D., its only president for the first thirty-five years, distinguished himself for scholarship at Union College, where he graduated in 1841. For two years thereafter he

taught. After finishing his theological course at Union Theological Seminary, he preached for ten years at Brockport, N. Y. In 1856 he was called to the presidency of Elmira College. Besides presiding over the college, he has at times filled the chairs of Latin and Greek, and all the time those of mental and moral philosophy, Christian evidences, biblical literature, and æsthetics.

The college itself and its alumnæ are the best witnesses to his worth and work. At the age of 70, and while in the full vigor of mental power, he retired from the executive work of the college to continue in his beloved work of teaching. He became president emeritus and professor of the same branches that for so many years occupied his attention, and, hale and youthful, continued to lecture with great vigor and acceptableness on the old loved themes.

Rev. Darius R. Ford, D. D., present and long time professor of the natural sciences, furnishes another instance of rare combination of gifts, great dignity, and suavity of manner and uncommon dexterity in imparting knowledge. For a generation (since 1863) he has been a mighty local force in all educational matters. Well preserved and in the ripeness of his power, on him depended no small part of the success and prosperity of the management.

PRESIDENCY OF DR. PHRANER.

In 1889, on the retirement of Dr. Cowles, Rev. Wilson Phraner, D. D., of Sing Sing, N. Y., was elected to the presidency and entered vigorously upon his office; he was, however, soon forced by failure of health to retire, but not without leaving abundant fruit of his brief administration.

PRESIDENCY OF DR. VAN NORDEN.

Late in 1889 Rev. Charles Van Norden, D. D., recently pastor of the North Church, of Springfield, Mass., where he succeeded Rev. Washington Gladden, D. D., was elected to the presidency.

STATISTICS.

Of graduates and other students passed beyond its care, Elmira College has had over 2,000, to be found everywhere, women of culture, of influence, often of wealth, not seldom of fame. Educators, artists, elocutionists, musicians, they have in every part of the country made for themselves an honorable record.

Of undergraduates, there has been from the beginning an annual average of 150. A recent increase has swollen this number to over 200. The local reputation for good behavior of these young ladies has always been deservedly high, owing no doubt to the admirable moral and religious control maintained by the former administration and to the atmosphere of self-respect and mutual good-will that has ever pervaded the college home. Few appeals have been made to any but the highest motives, the marking system has not been emphasized,

and in 1890 the last prize was abolished. The practical difficulty in the government of the institution has been to prevent the students from overworking under pressure of only noble motives.

COURSES OF STUDY.

In matter of standard, Elmira has always taken firm and foremost position, with many advances. The first freshman class in 1857 pursued the following required studies, usually four or five lessons each week: Cicero's orations, Kuhner's Greek grammar, Davies's university algebra, descriptive astronomy, critical reading of English poets, outlines of ecclesiastical history, botany and part of Mrs. Somerville's physical geography, philosophy of history, with a Sunday lesson in Nichols' Helps to Bible Study.

In the sophomore class Latin and Greek were continued; geometry, plane, solid, and spherical, completed; political economy and civil government, rhetoric, natural philosophy.

The junior class studied trigonometry, chemistry, French and German languages, with English literature, Kames's criticism, logic, geology, and mineralogy.

The senior class (with no electives) continued French and German languages and literatures through the year, conic sections and mathematical astronomy, mental science, applications of science to useful arts, moral philosophy, Paley's natural theology, Butler's analogy, with a Sunday lesson in Gregory's Evidences of Christianity. This course of study was in good faith designed by experienced college men to be fully equivalent to the regular four years' course of study at that time required in the best colleges for men. The less amount of Latin and Greek was sincerely believed to be fully compensated by an extensive and thorough study of modern languages which were not required at that time by any other college in the State, and by required courses in English literature and extended courses in history, ethics, and Christian evidences. It was at that time the most advanced course of required study in any institution for women in this country.

After a few years the other colleges raised their requirements in Latin and Greek for entrance to the freshman class and a few introduced French and German as electives. Elmira allowed three and a half years of thorough study of French and German to take the place of Greek as a full equivalent, and those who took Latin and Greek were required to take either French or German in addition. If Elmira could have been supplied with students well prepared for the freshman class, the course of study above described might have been made almost the ideal course for women.

About 1884 the course of study and the requirements for admission to the freshman class were considerably advanced so as to compare favorably with the best colleges for women in this State and in New England.

PHI MU PARLOR.

ELMIRA COLLEGE—OBSERVATORY HALL.

The requirements for admission to-day are those of Smith, Wellesley, and Vassar.

PREPARATORY DEPARTMENT.

From the beginning of its history until the present Elmira College has sustained a preparatory department of the grade of a first-class New England high school. As this has long since ceased to be a necessity and, indeed, has become clearly an embarrassment, it was resolved in the spring of 1890 to arrange for its progressive abolishment by discontinuation each year of the lowest remaining class. In 1893 the preparatory department came to an end and Elmira became a college, pure and simple.

ART AND MUSIC.

An art school under charge of an artist of national reputation, with one assistant, forms a valued adjunct.

A music school of high aims and most ably officered, with its own faculty of six specialists, all enthusiasts in their departments, greatly adds to the reputation and influence of the college.

FUNDS, BUILDINGS, ETC.

The property of Elmira, at fair valuation, is rated at $230,000 over and above all indebtedness, of which $25,000 form a beneficiary fund for aid of needy and worthy students, and $10,000 represent private scholarships.

The main building of brick, situated on a commanding site facing a beautiful campus, is 225 feet long and at the center two-thirds as deep, is heated by steam, lighted by electricity, furnished with elevator, and can accommodate, if necessary, 130 boarders, besides ample room for chapel, parlors, gymnasium, infirmary, recitation rooms, laboratories, music rooms, art studios, and art gallery.

An astronomical observatory, formerly belonging to the Elmira Academy of Sciences, situate on a site of its own near the campus, is equipped with a refracting telescope, a sidereal clock, an electric chronograph, and star charts. In an enlargement of the observatory on the north side there is a museum and a lecture hall, the former with mineralogical, geological, and zoological collections, the latter for microscopic and telescopic work, for lantern exhibitions, and popular scientific addresses.

All work done in Elmira is intended to be intensely practical. Mere cramming with book learning is held in disfavor. French and German are taught in the original languages, and the students learn to converse in these tongues as readily as to translate. Chemistry is acquired in actual handling of the reagents. Astronomy is studied

in the observatory, each student freely using every instrument. So of biology, geology, etc.

The fraternities have never been directly or indirectly represented. Two literary societies, originally called Philomathean and Kalosophian, and now designated simply by the Greek letters "Phi Mu" and "Kappa Sigma," comprising only full members of the four college classes, meeting on alternate weeks, devote themselves to literature, the drama, and good fellowship, much to the general enlivening and enjoyment of college life. The social atmosphere is always delightfully cordial, spiced with merriment and graced with affability, and finds its outlet not only in the beautiful and artistic society rooms, but in the pleasant dining hall, in occasional parlor reunions, and in none too infrequent "spreads."

The merriest and not least useful hour of the day comes immediately after a late dinner in a spacious, well-floored, and well-lit hall. This is called the "romping" hour, and the gravest Hypatia and most exalted Sappho unbends and laughs, sings, and dances to lively music to her heart's content. In this same hall later, after the evening study and before bedtime, gymnastic and Del Sarte exercises enable the young ladies to calm their wearied brains for sleep.

Degrees are conferred by Elmira only for merit. The practice of granting honorary distinction has fallen into disuse. A title from this institution represents work of high value actually done under competent supervision.

Elmira College has always issued a general annual catalogue, and of late has added thereto, each year, separate catalogues or circulars for the art and music schools. No historical volume, however, has been published.

In 1890 the word "female" was legally expunged from the title, and the proper designation of the institution now is simply "Elmira College." No legal limitation restricts the amount of gifts or of bequests in money to Elmira College.

PRESIDENCY OF DR. GREEN.

In June, 1893, the Rev. Rufus S. Green, D. D., was elected president, to succeed President Van Norden. He was a graduate of Hamilton College of the class of 1867.

INGHAM UNIVERSITY, 1857, LEROY.

By an act of the legislature in 1857 Ingham Collegiate Institute at Leroy, Genesee County, N. Y., was changed into Ingham University. This institution came into existence in 1841 as the Leroy Female Seminary. Only women were admitted to the university. It was a

Presbyterian school, but other denominations were entitled to representation in the board of trustees "in proportion to the funds contributed for its support." An interesting item for the history of higher education of women is the claim on the part of this university "to have been the first to introduce a college curriculum for the education of young ladies and the first that was empowered to grant diplomas."

The regular course extended over four years. Three departments—those of literature, music, and art—were open to students. In 1890 there were 144 collegiate students in the institution; its chancellor was the Rev. W. W. Totherole, D. D.; the number of instructors was 13; the net value of the property was $93,755.

In 1861 this institution received a grant of $5,000 from the State.

Its collegiate charter was revoked by the regents in 1892.

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VASSAR COLLEGE, 1861, POUGHKEEPSIE.

[By Margaret Sherwood.]

It occurred to me that woman, having received from her Creator the same intellectual constitution as man, has the same right as man to intellectual culture and development.

It is my hope to be the instrument in the hand of Providence of founding an institution which shall accomplish for young women what our colleges are accomplishing for young men.—*Matthew Vassar.*

Vassar College stands on the bank of the Hudson, 2 miles east of Poughkeepsie. The 200 acres that make up the college estate form a fitting background of meadow and hill and wood for the red brick buildings, the observatory, laboratory, museum, gymnasium, and conservatory that cluster around the large main building.

HOW IT CAME INTO BEING.

Perhaps the most important event in the history of Vassar is the fact of its foundation. That colleges for women should be founded having the standards and requirements of the American college for men was a wonder that has not yet ceased to call forth expressions of astonishment, even though Smith and Wellesley and Bryn Mawr and Barnard have risen up to say that Elmira and Vassar were not mistakes. People were busy then, as now, in discussing the limitations of woman's mental and physical strength. While they were talking, it occurred to a practical man to give them the opportunity to settle the question by fair trial.

"It is my hope," said Matthew Vassar, when the college was about to be opened, "indeed, it has been the main incentive to all I have already done, or may hereafter do or hope to do, to inaugurate a new era in the history and life of woman. I wish to give one sex all the advantages so long monopolized by the other. Ours is and is to be an institution for women, not men. In all its labors, positions, rewards, and hopes, the idea is the development and exposition, and the marshaling to the front and the preferment of women, of their powers on every side, demonstrative of their equality with men. * * * This, I conceive, may be fully accomplished within the rational limits of true womanliness and without the slightest hazard to the attractiveness of her character. We are indeed already defeated before we commence, if such development be in the least dangerous to the dearest attributes of her sex. We are not the less defeated, if it be hazardous for her to avail herself of her highest educated powers when that point is gained. We are defeated if we start upon the assumption that she has no powers save those she may derive or imitate from the other sex. We are defeated if we recognize the idea that she may not, with every propriety, contribute to the world the benefits of matured faculties which education evokes. We are especially defeated if we fail to express by our acts our practical belief in her preeminent powers as an instructor of her own sex."

VASSAR COLLEGE—MAIN BUILDING AND F. F. THOMPSON LIBRARY.

VASSAR COLLEGE—THE LAKE.

The man to whose generous confidence in women not only the daughters of Vassar, but all the college women of America owe a debt of gratitude, was an Englishman by birth.

THE FOUNDER'S LIFE.

Matthew Vassar was born on the 29th of April, 1792, at East Dereham, in the county of Norfolk, England. His father, a farmer, emigrated to America in 1796, and settled near the city of Poughkeepsie. Here he raised barley and brewed ale, ale no less famous than the beer that afterwards earned the money to found Vassar. Matthew, when a boy of fourteen, seriously objecting to assist his father in the brewery already established in Poughkeepsie, disappeared from home. With his clothes tied up in a pocket handkerchief, as became a hero, with his mother's blessing and her parting gift of 75 cents, he crossed the river at New Hamburg, and walking southward found employment in a country store near Newburg. Here he stayed four years, developing the business ability that afterwards characterized him, returning home at the end of that time with $150. He became his father's bookkeeper, afterwards started an independent business, and slowly built up a great fortune. Two nephews, Matthew Vassar, jr., and John Guy Vassar, were associated with him in the business before his own active connection with it ceased in 1866.

HIS INTEREST IN EDUCATION.

The idea of giving to women the opportunity to obtain the liberal education of which he had been deprived, was first suggested to Mr. Vassar by a niece, principal of Cottage Hill Seminary in Poughkeepsie. Throughout his busy life he had retained an interest in literature and in science, and in looking about the world to see where his money could be best employed, it is small wonder that he should think of woman and her needs. His interest resulted in the following resolve:

To build a college in the proper sense of the word, an institution which should be to women what Yale and Harvard are to young men, receiving them after suitable preparation at the academies and seminaries, and furnishing them with the means for a true liberal education.

"It was unoccupied ground," wrote President Raymond afterwards. "Millions had been spent in colleges for young men, while not a single endowed college for young women existed in all Christendom."

HIS DEATH.

This interest in the college never waned until the day of his death, June 26, 1868. He had withdrawn from his position on the executive committee of the board of trustees three years before, but still stood ready to help with money, with sympathy, or with his keen business ability. Dr. Raymond wrote of him that "his heart was as big as an elephant's and as tender as a babe's." Also:

It is a wonder how a man without any regular education can so correctly appreciate the necessities of such an institution, and the conditions of its success.

But it is the purity of his motives and the large and generous catholicity of his spirit, in connection with a broad common sense and much business experience, that explains it.

He died while reading his annual address to the board of trustees, in which he wished them "a cordial and final farewell."

Not expecting, from my advanced years and increasing infirmities, to meet with you officially again, I implore the Divine goodness to guide and direct you in all your councils.

THE CHARTER.

On the 18th of January, 1861, an act for the incorporation of the college was passed by the legislature of the State of New York, the bill having been received with much enthusiasm by the members of both houses. The first name given to the institution was "Vassar Female College," a name it retained until 1867, when the word "Female" was omitted.

BOARD OF TRUSTEES.

Mr. Vassar had already chosen 29 of his friends to form the first board of trustees. Most of them were, like himself, Baptists, though Mr. Vassar expressly stated that he wished the college to be non-sectarian. The first meeting was held at the Gregory House in Poughkeepsie, February 26, 1861. After an address Mr. Vassar transferred to the custody of the trustees bonds and mortgages, certificates of stock, and a deed of conveyance the value of which amounted to $408,000.

MR. VASSAR'S SUBSEQUENT BEQUESTS.

In addition to the sum already given, Mr. Vassar presented to the college in his lifetime the sum of $95,000, and at his death bequeathed—

1. A lecture fund of $50,000.
2. An auxiliary fund of the same amount.
3. A library, art, and cabinet fund of the same amount.
4. A repair fund of over $100,000.

THE FIRST PRESIDENT.

At the first meeting of the board Prof. Milo P. Jewett was chosen president of the college. This position he resigned in 1864, his place being filled by John H. Raymond, LL. D. Professor Jewett, prior to his resignation, had visited the leading schools for both sexes in England, France, and Germany, and returned to say that though his investigations had been interesting he had been unable to gain definite ideas as to what the college should be. The new needs in a new country seemed to demand original methods of procedure.

THE COLLEGE BUILDING.

A contract was made by the board of trustees with James Renwick, jr., for the erection of the college buildings. The work was

VASSAR COLLEGE—STRONG HALL.

begun as soon as possible, and on the 4th of June, 1861, Mr. Vassar "broke ground" in the presence of a few of his friends, tracing with a plow a part of the trench for the foundation stones of the building. In spite of the embarrassment from lack of funds during the civil war the college building was completed by 1865, an observatory had been erected, and a gymnasium was already begun. The main building is 500 feet in length, 200 feet through the center, and 164 feet through the transverse wings. It contains six independent dwellings for officers, accommodations for 400 students, a chapel, dining hall, parlors, library, and a large number of recitation rooms. All possible measures were taken to secure the comfort and safety of the young women who flocked to its doors.

ORGANIZATION.

The legislative authority, now, as at the beginning of the college, is vested in the board of trustees, who meet annually. Its officers are chairman, treasurer, and secretary. The management of the college is intrusted to standing committees—the executive committee, the committee on faculty and studies, the committees on the library, on cabinets and apparatus, on the art department, on scholarships, and for examining securities.

The internal organization has two branches, educational and domestic. The executive head of both is the president, upon whom devolves the educational direction and discipline of the college, as well as the moral and religious instruction of the students.

The lady principal, who is the president's chief assistant, watches over the health, social connections, and habits of the students. Formerly the students were kept in order by teachers and faculty, but now, under a self-governing system, they have assumed responsibility for their own conduct.

Each professor is the head of his department, having the direction of its methods, the organization of its classes, and the supervision of the teachers therein.

The faculty, consisting of president, lady principal, professors, and instructors, are empowered to regulate the internal life of the college, educational and domestic, subject to the authority of the board of trustees.

The "treasurer's department," the "steward's department," the "matron's department," the "engineer's department," the "janitor's department," and the "farm and garden" minister to the various needs of the members of the institution.

In this way has the ideal of the founder been realized, that the college woman should have the domestic comfort and the social life not deemed necessary for the college man.

THE COLLEGE OPENED.

On the 20th of September, 1865, the college was opened with 300 students, 8 professors, president, lady principal, and 20 assistant teachers. Three members of the faculty were women, as were all the assistants, it being the founder's opinion that it was due to simple justice and economy to have a large part of the instruction given by women. In the present faculty six of the professors and all of the assistants are women.

LIONS IN THE WAY.

Well equipped with instructors and with all the necessary apparatus for instruction, well supplied with students, this college, founded for the liberal education of woman, was confronted by the question: "What is a liberal education for a woman?" Should it incline less to the scientific and more to the æsthetic? Should music and the modern languages supplant to any degree the Greek and Latin of the men's college? Wisely, the professors resolved to experiment.

The trustees and founder had decided only a few points.

1. A complete domestic system must be incorporated with the educational.

2. The course of study must be liberal, thorough, and scientific, resembling not the academy or seminary but the American college.

3. The plan should not be a copy of existing models, but should be adapted to the needs of women. The claims of æsthetic culture were not to be ignored, and time should be allowed for the study of music and art.

Several questions were still open to discussion: Should the college adopt the university system, allowing each student to select whatever studies her tastes might indicate, or should the course be to a certain degree prescribed? Should the preference be given to language and literature study rather than to mathematics? Should the aim be to give a practical education, and if so, what might a practical education be?

THE FIRST PROSPECTUS.

Early in the spring of 1865 a prospectus was issued, containing a provisional plan. Instruction was offered in all collegiate studies, the student being allowed to choose which she should take up, though her choice was subjected to the approval of president and faculty. Candidates for admission should be over 15 years of age and should be prepared to pass an examination in arithmetic, English grammar, geography, and American history. The different branches to be taught were grouped in ten departments, with the statement that the scheme was merely tentative.

The difficulties to be met became apparent during the first year. The majority of the students had been poorly prepared. Many of them objected to taking up studies they did not like. It became

VASSAR COLLEGE—OBSERVATORY.

VASSAR COLLEGE—MUSEUM.

apparent that two measures must be taken: The first, the establishment of a preparatory school where young women could receive the thorough training necessary for admission to a collegiate course; the second, that a thorough course of study must be prescribed for the college classes in order to secure the desired results. In this last resolve the faculty were aided by the students themselves who, feeling the need of rigid mental discipline, pleaded for the introduction of a definite system with the highest educational standard.

FIRST CLASSES.

At the close of the second year an attempt was made to form the body of students into regular classes. The result was as follows:

Whole number of students	352
Seniors	4
Juniors	18
Sophomores	36
Freshmen	58
Regular preparatory students	71
Specials	165

PREPARATORY DEPARTMENT.

The preparatory department existed until 1888, when the faculty refused to admit students who were unable to enter the college classes. This was done on the plea that the admission of younger students tended to lower the standard of the institution.

PERMANENT COURSE OF STUDY.

The college did not attain a full collegiate character until the close of the third year. A plan for a permanent course of study was presented to the trustees at their meeting on June 23, 1868, and received their approval.

ORIGINAL CURRICULUM.

[From the catalogue of 1867-68.]

There are two regular courses of study pursued in the college, the classical and philosophical course and the scientific and modern-language course, and between these each student is allowed her choice. In special cases where advanced students desire to supply particular deficiencies in their previous education, courses specially suited to their wants will be arranged for them under the direction of the president and faculty.

REQUISITES FOR THE FRESHMAN CLASS.

1. For admission to the freshman class in either course the student must be prepared for examination in the following, or in equivalents: Harkness's Introductory Latin Book; Harkness's Reader; Cæsar, four books; Cicero, four orations; Virgil, six books; Harkness's Latin Grammar, complete; Robinson's University Algebra, to equations of second degree; Quackenbos's or Boyd's Rhetoric; outlines of general history.

2. A further examination will be required—

(1) For admission to the freshman class, in the classical course: In Harkness's Introductory Greek Book, Xenophon's Anabasis, three books, and Kühner's Grammar, to syntax.

(2) For admission to the freshman class, in the scientific and modern-language course: In Otto's French Course, Fasquelle's Colloquial Reader, Williams's English into French.

CLASSICAL COURSE.

Freshman year.

First semester.—Latin: Livy, Arnold's Prose Composition.

Greek: Felton's Historians; Kühner's Grammar, syntax; Arnold's Prose Composition.

Mathematics: Robinson's University Algebra, completed.

English: Exercises in composition.

Second semester.—Latin: Cicero, de Senectute et Amicitia; prose composition.

Greek: Homer's Iliad, six books; Kühner's grammar, completed.

Mathematics: Loomis's geometry.

English: Exercises in grammatical analyses.

SCIENTIFIC COURSE.

Freshman year.

First semester.—Latin: Livy, Arnold's Prose Composition.

French: Poiterin's Grammaire; Larousse's Lexicologie, 1e Année; Howard's Aids to Composition, begun; Scribe and Racine.

Mathematics: Same as in classical course.

[illegible]glish: Same as in classical course.

[illegible]*ond semester.*—Latin: Same.

[illegible]nch: Poiterin, 1e Année, and Howard Aids; completed. Racine and Souvest[illegible].

M[illegible]thematics: Same.

[illegible]any: Gray's Lessons and Manual, [illegible] excursions.

[illegible]glish: Exercises in analysis.

[Sophomore and junior pro[illegible]mes are omitted.]

Senior year.

First semester.—Intellectual philosophy: Haven.

Anatomy: Gray.

Chemistry: Stöckhardt and Wells.

Astronomy: Robinson's, begun.

German: Woodbury's Method; Adler's Reader.

Italian: Grammar and reader.

Latin: Cicero's Tusculan Disputations.

Second semester.—Moral philosophy: Wayland.

Physiology: John C. Draper.

Astronomy: Robinson's, completed.

Criticism: Kames's Elements.

Languages: German (Goethe's Iphigenia); Italian (Dante), or Greek (lyrical poets).

Senior year.

First semester.—Philosophy: Same.

Anatomy: Same.

Chemistry: Same.

Astronomy: Pierce's spherical, begun.

German: Goethe's Torquato Tasso; free compositions.

Italian: Same as in classical.

Logic and political economy: Whately and Wayland.

Second semester.—Philosophy: Same.

Physiology: Same.

Astronomy: Pierce's, completed.

Criticism: Same.

Languages: German, Italian, or French literature.

In the junior and senior years each student elects three of the studies laid down for each semester, subject to the approval of the faculty.

PRESENT CURRICULUM.

Various changes have taken place in the course, as may be seen by comparison of the above with the following extract from the catalogue for 1894–95:[1]

[1] The plan of having two distinct courses, the classical and scientific, was abandoned, and a course partly prescribed, partly elective, was substituted.

Candidates for the freshman class are examined in the following studies:

English.—In 1895 every candidate will be required to write a short composition upon a subject assigned at the time and taken from one of the following works:

Shakespeare's Merchant of Venice and Twelfth Night; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; The Sir Roger de Coverley Papers in the Spectator; Irving's Sketch Book; Scott's Abbot; Webster's First Bunker Hill Oration; Macaulay's Essay on Milton, Essay on Addison; Longfellow's Evangeline.

The examination essay should cover not less than two pages, foolscap; it should be correct in spelling, punctuation, idiom, and division into paragraphs.

Beginning with 1896, the entrance requirements will be as follows:

1. Reading: A certain number of books are set for reading. The candidate is required to present evidence of a general knowledge of the subject-matter, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of several topics, to be chosen by the candidate from a considerable number—perhaps ten or fifteen—set before him in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books.

The books set for this part of the examination will be:

In 1896: Shakespeare's A Midsummer Night's Dream; De Foe's History of the Plague in London; Irving's Tales of a Traveller; Scott's Woodstock; Macaulay's Essay on Milton; Longfellow's Evangeline; George Eliot's Silas Marner.

History.—Outlines of Greek and Roman history to the establishment of the Roman Empire; outlines of American or English history. Any standard history of Greece, Rome, England, or the United States may be used. The following are recommended: For Greek and Roman history, the sections on Greek and Roman history in Sheldon's General History or Myers' General History; for American history, Johnston's History of the United States or Fiske's History of the United States; for English history, Gardiner's English History for Schools or Montgomery's Leading Facts in English History.

Mathematics.—(*a*) Algebra: The requirements in algebra embrace the following subjects: Factors; common divisors and multiples; fractions; ratio and proportion; negative quantities and interpretation of negative results; the doctrine of exponents; radicals and equations involving radicals; the binomial theorem of the extraction of roots; arithmetical and geometrical progressions; putting questions into equations; the ordinary methods of elimination and the solution of both numerical and literal equations of the first and second degrees, with one or more unknown quantities, and of problems leading to such equations. The text-books used should be equivalent to the larger treatises of Newcomb, Olney, Ray, Robinson, Todhunter, Wells, or Wentworth.

(*b*) Plane geometry, as much as is contained in the first five books of Chauvenet's Treatise on Elementary Geometry, or the first five books of Wentworth's New Plane and Solid Geometry, or Wells's Plane Geometry, or the first six books of Hamblin Smith's Elements of Geometry, or chapter first of Olney's Elements of Geometry.

In order to pursue successfully the work of the college, recent review of the work completed early in the preparatory course is necessary.

Latin.—Grammar, Allen and Greenough or Gildersleeve-Lodge; Latin composition, Collar (parts third and fourth), or Daniell (parts first and second), or Allen (fifty lessons); Cæsar, Gallic War, four books; Cicero, seven orations (the Manilian Law to count as two); Vergil, Æneid, six books. Translation at sight from Cæsar's and Cicero's orations. The Roman method of pronunciation is used.

The attention of preparatory schools is specially called to the following points:

1. Latin composition: Greater thoroughness in drilling the student in the grammatical forms and simpler constructions of the language.

The advantage of studying Latin prose in connection with the various authors read.

2. Pronunciation: Practice in reading Latin with special attention to vowel quantities. Training the ear by the translation of Latin read aloud.

In addition to the Latin, one other language is required. This may be Greek, German, or French.

In 1896 a third language (French or German) will be required.

Greek.—Candidates must be able to read at sight easy Greek prose and easy passages from Homer; also, to render easy English passages into correct Greek. For this they should have thorough training in grammar, with constant practice from the start in translating sentences into Greek, and should read carefully at least four books of the Anabasis or the Hellenica and three books of the Iliad or the Odyssey, with constant practice in translating at sight. They should have at command a fair vocabulary, should be able to recognize forms at a glance, and to read Greek aloud intelligently and with correct pronunciation.

Practice in translating from hearing is recommended strongly.

German (*if offered as the second language*).—Candidates for the freshman class are expected to have a thorough knowledge of German grammar; they must have acquired facility in practically applying the rules of construction by translating easy English prose into German. They are also required to read and to be able to give in German some account of the following works: Immermann, Der Oberhof; Wagner, Goethe's Knabenjahre (Cambridge University Press ed.); Lessing, Minna von Barnhelm; Schiller, Wilhelm Tell (Deering ed.); Goethe, Hermann und Dorothea; Freytag, Die Journalisten.

Throughout the course German is the language of the class room, therefore good preparation in conversation is necessary, facility in reading and writing German script indispensable.

German (*if offered as the third language*).—Schmitz, Elements of German Language, I, II. Translation. Three of the following books: Fouque, Undine; Storm, Immensee; Heyse, L'Arrabiata; Gerstacker, Germelshausen; Freytag, Soll und Haben (Macmillan ed.).

French (*if offered as the second language*).—A thorough knowledge of French grammar and ability to translate easy English prose into French. (Whitney, Practical French Grammar, recommended). Six of Bocher's College Plays: Daudet, La Belle Nivernaise; Souvestre, Un Philosophe Sous Les Toits; Julliot, Mademoiselle Solange; Dumas, La Tulipe Noire; Erckmann-Chantria, Le Conscrit de 1813.

As French is the language of the class room, it is essential that candidates for admission should have some practice in French conversation.

French (*if offered as the third language*).—A knowledge of the fundamental principles of grammar. Whitney's Practical French Grammar, part first. Henri Greville, Dosia; Octave Feuillet, Le Roman d'un jeune homme pauvre; Daudet, La Belle Nivernaise, and three of Bochers's College Plays. It should be understood that in these requirements it is the knowledge of the language itself, rather than of the grammar which is demanded.

The full preparation in either French or German should cover a period of at least two years, five recitations a week, under competent instructors.

ADMISSION TO ADVANCED STANDING.

Candidates for advanced standing not coming from other colleges may be admitted, on examination, to the regular course at any time previous to the beginning of the the junior year. Such students will be examined in all prescribed studies antecedent to the desired grade, including the requirements for admission to the college, and in such elective studies as shall be chosen by the candidate and approved by the faculty.

Candidates coming from other colleges must submit their courses of study and their certificates to the judgment of the faculty. No student will be received as a candidate for the degree of bachelor of arts after the beginning of the senior year.

COURSES AND METHODS OF INSTRUCTION, ARRANGED BY DEPARTMENTS.

The course of study leading to the baccalaureate degree extends over four years.

The aim is to give the student the opportunity to follow lines of study continuously through both the required and the optional portions of the course.

Through the first two years of the course each student must have fifteen hours of class-room work per week. During the last two years, fourteen hours are allowed; in 1895–96 this rule will apply to the second semester of the sophomore year.

All elections are subject to the approval of the faculty. No changes in elections will be considered after the first Monday of the semester.

Two languages, Latin and the second language offered for entrance to the college, are required throughout the freshman year of every candidate for a degree. The second language may be Greek, German, or French.

An opportunity is given, in the elective part of the course, for beginning the study of Greek, German, or French.

Important changes in the curriculum will go into effect in 1895–96. There will be less prescribed work and a number of new elective courses will be offered.

DESCRIPTION OF THE COURSES.

FRESHMAN YEAR.

Latin.—The course in Latin extends through the four years of the undergraduate course, being required for the first and elective for the last three years. The aim of the course is to acquaint the student with the principal phases of literary activity among the Romans through the study of representative authors. In the department of history, Livy and Tacitus exhibit natural development in style and method. Cicero and Lucretius represent opposing schools in Roman philosophy; Horace and Juvenal show the growth of satire; Horace, Catullus, Tibullus, and Propertius, that of elegy and the lyric; Plautus and Terence, the course of Roman comedy. Using these authors as starting points, the endeavor is to bring before the student the lines along which the various departments developed, and also to show the connection of literature with history and politics, as well as with the various social conditions and relations of Roman life.

The development of the language in literary form is pointed out through explanations of grammatical forms and constructions, and the relation in which these stand to the historical growth of syntax. Much stress is laid on these points in connection with the required work of the freshman year, and while attention is still directed toward them in the elective courses of the other years (especially in the study of Plautus and Terence), the literary side of the language is made prominent. Facility in reading Latin is cultivated by translation at sight. The study of Latin composition is pursued in the freshman and sophomore years for the most part in connection with the authors read.

Required: 1. Cicero, two orations (Verrine or Philippics), Livy, Books XXI–XXII (Westcott) or Books V–VII (Cluer) [3] Latin prose composition [1]. First semester.

2. Livy (continued), Cicero, de Senectute or de Amicitia (Kelsey) [3], Latin prose composition [1]. Second semester.

The purpose of this course, which runs through the freshman year, is to enable the student to read ordinary prose Latin with greater ease and intelligence. The

weekly exercises in Latin composition are for the most part based on the texts read, and translation from hearing Latin read is a regular class exercise. The peculiarities of Livy's style are now constantly noted and contrasted with the classic idiom of the selections from Cicero. The orations will not be read this year.

Greek.—The aim is to acquire as many-sided a knowledge of Greek as possible. Facility in reading Greek is cultivated, and to this end practice at sight is given and private reading is encouraged. Attention is paid to grammatical principles, to the development of the language and of the literature, to different phases of Greek life and thought. Careful study is given to the style of each author and to the distinctive excellence of each, and in advanced classes to text criticism. The courses given embrace representative authors in history, oratory, philosophy, in epic, lyric, and dramatic poetry. In the junior year, a course in elementary Greek is offered to any non-Greek students who may wish it.

A society called the Hellenic Societ[illegible] formed for the purpose of keeping itself acquainted with the results [illegible]logical research in Greece.

Vassar College contributes to th[illegible] the American School of Classical Studies at Athens. The school aff[illegible]s for archæological investigation and study in Greece, and graduates o[illegible]lege are entitled to all its advantages without expense for tuition.

Required: 1. Lysias; Plato, Apology [illegible]glish into Greek [1]. Translation at sight and also from hearing. Lectu[illegible]gal, political, and social aspects of Athenian life. Freshman year, first se[illegible]

2. Homer, Odyssey; Herodotus [3]. [illegible] into Greek [1]. Translation at sight. Lectures on Homeric antiquities [illegible] the Homeric question. Historical explanation of the Homeric forms and s[illegible] Freshman year, second semester.

3. Demosthenes, On the Crown; Æ[illegible] Against Ctesiphon [2]. English into Greek [1]. Lectures on Attic ora[illegible] phomore year, first semester.

4. Plato, Protagoras [2]. Lectures on Socrates, the Socratic method, the Sophists. Sophomore year, second semester.

Courses 3 and 4 will not be required after this year.

French.—Required: 1 and 2. Reading, Balzac, Eugénie Grandet; Hugo, Hernani and Quatrevingt-treize; Ponsard, Charlotte Corday; Delavigne, Louis XI. Translation of English into French. Review of syntax. One hour a week of the second semester is devoted to the literature of the nineteenth century. Bonnefon Ecrivains modernes. Freshman year, first and second semesters [4].

German.—Required: 1 and 2. Grammar. Composition. Translation at sight from English into German. Harris, German prose composition; Buchheim, prose composition; Eichendorf, Aus dem Leben eines Taugenichts. Poems by Goethe, Schiller, Uhland, Chamisso, etc. Schiller, Maria Stuart; Goethe, Egmont. Freshman year, first and second semesters [4].

In the freshman year the grammatical principles are carefully reviewed and in the subsequent classes incidental instruction in grammar is given.

English.—The instruction given by the department of English has three objects: (1) proficiency in English composition; (2) a general acquaintance with English literature; (3) a more minute knowledge of certain authors, whose works illustrate the development not only of English literature, but also of the English language.

The first of these objects is considered in the required work of the freshman and sophomore years—courses 1 and 2, and 3, respectively, and in elective courses A and B. Especial stress is laid upon frequent and regular practice.

The second of these objects is considered in the required sophomore courses 4 and 5, which are introductory to the subject, and in elective courses C, D, E, F, and G. In these courses a large amount of reading is prescribed, a still larger amount is recommended, and from time to time written work is required.

The third of these objects is considered in elective courses H and I, J, K, L, and M.

The courses in elocution are included in this department for convenience, but form no part of the regular English work, and are not counted toward the degree of A. B. They consist of a required course for freshmen, one hour per week, second semester, and of an elective course, open to sophomores, juniors, and seniors, one hour per week, second semester.

Required: 1. English composition. Genung's Outlines of Rhetoric; exercises, weekly themes. Freshman year, first semester [3].

2. English composition. Wendell's English Composition, illustrated by a study of masterpieces; themes and essays. Freshman year, second semester [3].

Mathematics.—Required: 1. Solid and spherical geometry. Freshman year, first semester [3].

The exercises in geometry include recitations from the text-book, original demonstrations of propositions and applications of principles to numerical examples. The text-book is Chauvenet (revised by Byerly).

2. Algebra. Freshman year, second semester [2].

The text-book in algebra is Hall and Knight's Higher Algebra.

3. Plane trigonometry (Wells). Freshman year, second semester [2].

In plane trigonometry attention is given to trigonometric analysis and the solution of triangles. After the student has gained facility in the use of trigonometric tables, application of the principles is made to problems in mensuration, surveying, and navigation.

Hygiene.—Required: Hygiene [1]. Freshman year. A course running through the year. One hour weekly is devoted to this course, and the study comprises lectures, recitations, and practical investigation of the principles of house sanitation. Drawings and models are provided for this study. All new students are required to attend.

In 1895–96 this course will extend through the first semester only.

SENIOR YEAR.

Philosophy.—The study of psychology is required of all candidates for a degree. The subject is presented as science of mind, to be distinguished on the one hand from the physical sciences and on the other from speculative philosophy. The intimate relation of mental phenomena to the physical organism is carefully considered and the practical bearing of psychological principles on the rules of thought and methods of education is kept constantly in view. The aim of the instructor in this subject, as in all the courses of the department, is both to further the immediate intellectual discipline of the student and also to lay a basis for the formation of a sound and independent conception of self, the world, and God. Lectures and text-book study are supplemented by essays and free class-room discussion. The student is encouraged in every way possible to think for herself.

The course in ethics is also required of students for a degree. The methods of instruction are similar to those outlined above. A text-book forms the basis of the work, and is made the ground of free discussion. A course of lectures supplements the work, and reading in the history of ethical philosophy is required. Topics of study are the conscience, moral law, the will, and the ultimate ground of moral obligation. The relations of the principles thus discovered to the duties of moral beings to self, others, and God are discussed.

Required: Ethics; lectures on the ethical philosophy. Senior year, second semester [3]. (After this year, first semester.)

Elective: Course A.—History of ancient philosophy; lectures, recitations, reading of authors in translation, essays. Junior year, second semester [2]. (Also open to seniors in 1894–95).

Course B.—History of modern philosophy. Senior year, second semester [3]. (In 1895–96 this course will extend through both semesters.)

Sanskrit.—Sanskrit is an elective course of two hours running through senior year. The study of the characters and inflections of the language is first taken up with Whitney's Grammar as a text-book; later, selections from Lanman's Reader are read.

Students should consult with the instructor before electing the course.

For the present year the course is given in part.

Latin.—Course I: Roman elegy, Catullus (Merrill), Tibullus and Propertius (Ramsay). First semester [3].

Catullus's position among Latin poets, his originality, the influence of the Alexandrine school, and similar questions are considered. Tibullus and Propertius are used to illustrate the development of the elegy.

This course will be offered in 1895–96.

Course J: Juvenal, Satires (Hardy), Pliny, Letters (Pritchard and Bernard). First semester [3].

As these authors present opposite views of social life in Rome under the Early Empire, an important feature of the work consists in the preparation of papers on various topics suggested by the text.

Course K: Lucretius I, III (Kelsey), Cicero, Tusculan Disputations I (Harper's text). Second semester [3].

The first Book of Lucretius gives a general presentation of his form of Epicureanism, and from the third Book and the Tusculan Disputations are selected the portions that bear on the questions of the immortality of the soul.

Course L: Roman institutions. Second semester [2].

The purpose of the course is to trace the connection between modern institutions and forms of government and those of ancient Rome. After briefly considering the attitude of modern criticism toward the early period of Roman history, the institutions of the regal period are taken up, the manner of their development into republican forms and offices, and their final absorption into those of the Empire. The original authorities as well as the works of Niebuhr, Lewis, Ihne, and Mommsen are used.

This course is open to sophomores.

Course M: An introduction to comparative grammar. Second semester [1].

This course is intended to give some general idea of the history, theories, and methods of modern philology, with special illustration from the Græco-Italic group of languages. The class will consult the works of Whitney, Delbrück, and others with references to the larger treatises of Brugmann, King and Cookson, and G. Meyer.

Greek.—Course B: (Short course continued.) Same work as in freshman course. First and second semesters [3].

Course I: Plato, Republic. First semester [3].

Course J: Aristotle, Politics. Second semester [3].

Course K: Æschylus, Seven against Thebes and Agamemnon. Second semester [2]. (Begins in 1894-95.)

Course L: Pindar and lyric poetry. Second semester [2]. (Begins in 1895–96.)

French.—Course F: Corneille, Le Cid, Racine, Andromaque, Molière, Le Bourgeois gentilhomme. Lectures upon the society of the seventeenth century, the Hotel de Rambouillet, and the French Academy. Discussions of topics that have been prepared by the students. Conversation. First semester [2].

Course G: Critical, analytical, and comparative study of the drama of the seventeenth century. Lectures upon the rise of the French drama. Extensive readings. Conversation. Second semester [2].

Course H: The philosophical, the religious, and the miscellaneous literature of the seventeenth century—Pascal, Descartes, Bossuet, La Fontaine, and Mme. de Sévigné. Lectures and conversation. First semester [2].

Course I: The literature of the Renaissance period. Reading of extracts from the works of Amyot, Montaigne, Agrippa d'Aubigné, and other writers of the times. Lectures on French literature from its beginning to our times. Second semester [2].

Course J: Contemporary literature. The literary theories of the Romanticists, the Naturalists, the Parnassians, the Symbolists, and the Decadents. Foreign influences—Tolstoïsm and Ibsenism. The moral and religious reaction in literature. The new critics, Brunetière, Tissot, Faguet. Recent writers, Taine, Renan, Schérer, Cherbuliez, Loti, Coppée, Daudet, and de Vogué. Senior year, first and second semesters [2].

German.—Course G: History of modern literature. Critical study of poetical productions. Collateral readings and lectures will supplement the work in the class room. Essays. Lessing's prose works. First semester [2].

Course H: Work of course G continued. Goethe's Faust, Parts I and II. Second semester [2].

Course I: Gore, Science Reader, or Hodges's Course in Scientific German. Second semester [1].

English.—Course H: Anglo-Saxon. Bright's Anglo-Saxon Reader; Sievers's Grammar. First semester [3].

Course I: Anglo-Saxon. Béowulf. Versification. Textual criticism. Theories of origin. Second semester [3]; continuation of H. Omitted in 1894–95.

Course J: Chaucer. The Canterbury Tales (Clarendon Press series) and Minor Poems. First semester [3]. (Second semester, 1894–95.)

Courses K and L: Shakespeare. A minute study of six plays, three each semester. May be elected for a single semester or for the whole college year. First and second semesters [3].

Course M: Bacon and Milton. Bacon's Essays and Advancement of Learning; Milton's Areopagitica, English poems, and first two or three books of Paradise Lost. First semester [3], alternate years, beginning with 1895–96.

Mathematics.—Course F: Quaternions. First semester [3].

Course G: Quaternions continued. Second semester [2].

This course includes the general properties of scalars and vectors, quaternion interpretation and applications of quaternions to the geometry of the plane, right-line, and sphere.

Course F presupposes courses A and C.

Course I: Curve tracing. First semester [2].

Lecture course with daily practice in curve tracing.

Prerequisite: Courses A, C, H.

Course J: Analytic geometry of three dimensions (C. Smith). The geometry of planes and quadric surfaces. Second semester [3].

Prerequisite: Courses A, C, H, I.

Course K: Modern methods in analytic geometry. First semester [3].

Course L: Modern methods in analytic geometry. Continuation of Course K. Second semester [3].

Prerequisite: Courses A, C, H, I, J.

Course M: Projective geometry. First semester [3].

Course N: Projective geometry. Continuation of Course M. Second semester [3].

A lecture course based on Reye's Geometrie der Lage.

Prerequisite: Course A.

Course O: Analytic mechanics. First semester [3].

The elements of statics and dynamics. Applications to practical problems. The fundamental principles of mechanics and the elements of the theory of the potential.

Prerequisites: Courses A, C, D.

Astronomy.—Course D: Spherical and practical astronomy. First semester [3].

Course E: Theoretical astronomy. Second semester [2].

These courses enter into a more detailed study of certain departments of practical and theoretical astronomy, and require a working knowledge of the calculus. They must, therefore, presuppose mathematical courses A and B. During the first semester the students use the meridian circle, making and reducing their own observations. They predict occultations and observe them. In the second semester practice is transferred to the equatorial telescope. The order and character of practical work through the year, however, must frequently vary according to the positions of celestial objects of study. Theoretical astronomy is generally treated under the form of comet's orbit.

Course F: The solar spectrum. Second semester [2].

This course in the study of the sun will introduce the student to the principles underlying our knowledge of the constitution of the celestial bodies as revealed by the spectroscope. It does not presuppose the course in general astronomy, but an ordinary knowledge of the solar system is desirable.

Physics.—Course D: Practical physics; experimental work in physical measurements and electricity with lectures and collateral reading. First semester [3].

Course E: Practical physics; experimental work in light with lectures and collateral reading. Second semester [3].

Chemistry.—Course D: Organic chemistry. First semester [3]. Two lectures and three hours of laboratory work per week. Open to those who have completed Course B.

Course E: Sanitary chemistry. Second semester [3]. One lecture and six hours' laboratory work per week. Chemistry of air and water in their relation to health, water supply and purification, ventilation, food adulteration, and legal standards of purity. Open to those who have completed courses C and D.

Course F: History of chemical theory. Second semester [2]. Open to those who have completed Course D.

Geology.—Course D: An advanced course, either in petrography or in paleontological and stratigraphical geology, with practice in field work. First semester [2].

Course E: Advanced geology. Either a continuation of Course C, or, for those who have not pursued Course C, a similar course. Second semester [2].

Biology.—Course C: General Zoology. First semester [3]. Three lectures and four hours laboratory work weekly. Open to those who have had Course B.

This gives the student a systematic knowledge of the animal kingdom, attention being paid chiefly to the classification, development, and homologies of invertebrates.

Course D: Embryology. Second semester [3]. Three lectures, four hours' laboratory work weekly. Open to those who have had Course B.

Thorough work on the embryology of the chick is followed by a brief comparative study of the development of the vertebrates. The usual method of making and studying sections of the chick is supplemented by models in clay made by the students to illustrate the more important stages in development.

Course E: Higher biology. Second semester [1]: Open to those who have taken Courses C and D.

This course begins with a history of the development of the biological sciences with special reference to the growth of the evolution theory. Some of the leading questions of biology, such as natural selection, evolution, heredity, are discussed in the lectures.

Course F: Current biological literature. First and second semesters [1]. Open to seniors who have had Course B and are taking Courses C and D.

The class meets weekly throughout the year. The aim of the course is to give

the student familiarity with current biological literature, practice in bibliography, and in the presentation and discussion of papers.

Course G: Comparative anatomy or histology. Second semester [2]. Three to four hours' laboratory work a week. Open to those who have had course B.

This course is intended to give a comparative knowledge of the structure of the various organs of vertebrates. Those who wish to study medicine will have an opportunity to do special work in comparative osteology. This course may alternate with a course in histology.

History.—Course D: American constitutional history. First semester [4].

This course is open to students who have had at least three courses in history.

The course is intended to offer opportunity for critical study of the origin and development of the American Constitution. The specific lines of work along which the general subject is studied vary from year to year. The class is divided into small sections, thus affording opportunity for constant discussion of facts and principles and the individual study of special topics.

Course E: American and English constitutional history. Second semester [3].

This course is open to students who have completed Course D.

The course completes the work of Course D, and includes a comparative study of the existing political institutions of America and England.

Course F: Nineteenth century history. First semester [2].

This course is open to students who have completed Course B and Course C.

The object of the course is to study the different political conditions in Western Europe as they have been developed from the French Revolution. The special subjects considered include the growth of republican ideas in France, the unification of Italy, the establishment of the German Empire, and the revolutionary movements of 1830 and 1848. Special topics for individual study are taken up by each member of the class and pursued throughout the semester.

Course G: Comparative politics. Second semester [2].

This course is open to those who have completed Course F.

The work comprises a study of different theories in regard to the origin and functions of the State, with an examination of the application of these theories in the different forms of modern federal government. The specific questions considered vary from year to year.

During the year 1895–96 and subsequently the required work in history will be a course of three hours a week throughout the sophomore year in general European history.

Economics.—Course D: Railroad transportation, trusts, and the relation of the State to monopolies. First semester [2]. Must be preceded by A.

Laissez-faire, the argument for and against, and substitutes proposed for this precept; definition and classification of monopolies; transportation prior to the railway, development of the railway system, results of improved transportation and communication, railway organization and accounts, competition, combination, discrimination, rates, railroad policy of different countries and of this country before 1887, constitutional and legal limitation of the legislative power in controlling transportation agencies, proposed solutions of the railway problem, including State ownership, the interstate commerce law and its results; the development, organization, advantages, and dangers of trusts, antitrust legislation; municipal ownership of waterworks, gas works, electric-lighting plants and street railways; conclusion as to the proper treatment of monopolies.

Course E: (*a*) The labor problem; its origin and attempts toward its solution; (*b*) Socialism. Second semester [3]. Open to those having had A.

The chief topics considered will be the historical basis of the labor problem in the economic development of the last hundred years; the progress and present condition of the working classes; their complaints and claims; history and aims of workingmen's combinations; conciliation and arbitration; cooperation; profit

sharing; different views as to the proper relation of the State to industry; factory and other legislation; history of socialism, its present strength, critical study of the proposals of the different schools of socialists; principles of social reform.

Course F: Social science. First semester [2]. Open only to seniors who have taken A.

Sociological bearings of natural selection, heredity, environment, free will; physical, physiological, psychological, moral, and social causes of abnormality; statistics of the causes of pauperism, history of the English poor laws; principles that should direct charity; private relief, charity organization, public relief, almshouses, old age pensions and workingmen's insurance; relief for the unemployed, including labor colonies and the tramp problem; dependent children; relief of the sick; insanity; statistics of the causes of crime; criminal anthropology; prevention of crime; principles that should govern the treatment of offenders; delinquent children; reformatories; prison methods, cumulative sentence; the family and divorce. Visits have been made to various charitable and correctional institutions, of which there is a considerable number within easy access of the college. The formal and informal lectures by officers in charge of the institutions visited have been very instructive.

Course G: Economic seminary. Second semester [2]. This course will be offered only when desired by several properly prepared students. A prerequisite for admission is the completion with success of at least three courses in economics. If not previously taken, Course E must be selected contemporaneously with the seminary.

Art.—Course C [2]: First semester.

Painting: Classic and Byzantine painting, Renaissance painting, Giotto, Fra Angelico, Masaccio, Leonardo, Michael Angelo, Raphael, Titian, Veronese, Durer, Rubens, Rembrandt, Velasquez, Murillo, Poussin, David, Millet, Hogarth, Reynolds, Benjamin West.

Music.—Course C: Counterpoint. Exercises in adding one, two, three, four, or more voices in simple counterpoint to given or original cantus fermi. Also the principles employed in writing double counterpoint, canon, and fugue. First semester [2].

Course D: History. It is the aim in this course to study, under the following headings, the outlines of musical progress from the time of the most ancient Oriental civilization to the present. Oriental and ancient music; the first ten centuries of Christian music; from Guido to the fourteenth century; epoch of the Netherlanders; the rise of dramatic music; the beginning of oratorio; instrumental music from the sixteenth to the nineteen century; general development of Italian, French, and German opera; of the oratorio, cantata, passion music, and sacred music. First semester [2].

Course E: History of dramatic music. The Greek drama; its rise and decline. Invention of the opera or rediscovery of dramatic music by the Florentine Camerati, and its progressive development into the music drama of Richard Wagner. History and synopsis of operas representative of the various schools—Neapolitan, French, Italian-German, national German, and cosmopolitan. To be illustrated at the piano forte. Second semester [2].

Course F: History of sacred music. Second semester [2]. Liturgical music and musical instruments of ancient peoples; music of the early Christians; of the Roman, Greek, and Protestant church. History and analysis of the forms employed in modern worship music, namely: The recitative, aria, chant, canticle, anthem, motette, chorus, familiar hymn tunes and Gospel hymns, cantata, oratorio, passion music, and mass. History and analysis of one or more of the standard oratorios (the Creation, the Messiah, Elijah, St. Paul, etc.), and of organ music and miscellaneous solo forms suitable for purposes of worship.

Courses E and F are exchangeable. Students electing both may count but one toward the degree.

The College Chorus meets once a week and offers class training in the principles and practice of vocal music, namely: Notation, time, accent, dynamics, tone production, articulation, and expression.

GRADUATE COURSES.

Courses of advanced study will be arranged by the various departments of the college for graduates of colleges who may prove to the faculty their ability to profit by them. The student will have the advantage of study with the instructor and of a general direction in her investigations.

Graduate courses of study, under the direction of the heads of the different departments of instruction, will be arranged for such resident graduates as wish to take examinations for the second degree in arts (A. M.).

DEGREES.

Students who have completed the regular course will receive the first or baccalaureate degree in arts (A. B.).

No person will be admitted to the college as a candidate for the degree of bachelor of arts after the beginning of the first semester of the senior year.

The second degree in arts (A. M.) may be conferred upon bachelors of arts of this or any other approved college who have pursued a course of advanced nonprofessional study. The required period of residence is one year, but graduates of this college studying in absentia must employ at least two years to complete the same amount of work. Nonresidents must submit their proposed courses of study to the faculty not later than November 1 of the year preceding that in which the degree is to be taken. The candidate must pass examinations on the course of study arranged and present an acceptable thesis. The title of the thesis must be presented to the faculty as early as possible and not later than January 1 of the year in which the degree is conferred. A fair copy of the thesis should be sent to the president's office not later than May 1 of the same year.

The degree of doctor of philosophy (Ph. D.) will not be conferred by the college at present. In the estimation of the trustees and faculty the requirements for this degree can not be met properly where there is not special provision made for extended graduate work, such as can not be offered by institutions without a university equipment.

COLLEGE BUILDINGS AND PROPERTY.

Since the college opened with its two buildings—the main hall and the observatory—various others have grown up about it. The museum, erected in 1866; the laboratory, erected in 1880, the gift of John Guy Vassar and Matthew Vassar, jr.; the conservatory, dating from 1886; the alumnæ gymnasium of 1889, and Strong Hall, a dormitory built in 1893, testify to the growth and prosperity of the college. All, especially the observatory and the laboratory as well as the gymnasium, are furnished with excellent apparatus for their respective purposes. A valuable art collection is found in the museum, part of which is the gift of Matthew Vassar, who purchased from the Rev. Elias Magoon, D. D., of Albany, more than 400 pictures in oil and water colors.

No sep library building is in existence, the present library of about olumes occupying a large room in the main building. The tot e property amounts to $1,921,518.

PROFESSOR MITCHELL.

No Vassar would be complete without mention of her famou r, Miss Mitchell.

Maria ll was born at Nantucket on August 1, 1818. Her parents were akers. As a child she assisted her father in astronomical work. She studied with him and in one of the Nantucket schools until her eighteenth year, when she became librarian in the Athenæum Library in her native town. Here she found ample opportunity for pursuing her studies, astronomy being the chief. She carried on practical work tical and discovered several new comets. In October, overed one that had not been seen before. On this her

After a sojourn in Eu became acquainted with Sir John Herschel, Sir Geor ary, ier, Humboldt, and some of the leading astronomers o taly, sumed her work as librarian in Nantucket. In 1865 she was nted to the professorship of astronomy in Vassar, a position w he occupied until 1888.

The strength and s aracter and the inspiration of her class work left an im be forgotten on all students who came in contact with her. l in June, 1889.

VASSAR'S PRESIDENTS.

The first acting president of the college was the Rev. John H. Raymond, LL. D., whose death in 1878 left the chair vacant. It was filled by the Rev. Samuel L. Caldwell, who held it until 1887 and then resigned. An interregnum of a year followed, during which time the Rev. James Ryland Kendrick assumed the position of president pro tempore. In 1886 Dr. James W. Taylor was elected to the office, which he still holds.

DR. RAYMOND.

To no one is Vassar more deeply indebted for her success and for her persistent effort to uphold a high standard of scholarship than to her first president. Taking up the work, as he did, at its very beginning, he found himself confronted by the old problem, how to bring order out of chaos? He was to decide on the organization of the college, collect a faculty, and, hardest of all, convince the girls gathered from seminaries far and near of the value of sound systematic training. No further recognition is needed of the steadfastness, breadth of mind, and sound scholarship of Vassar's first president than his success in realizing his ideal for the college. "My idea is not at all the one at first proposed," he wrote, "to make the school an omnium gatherum of ages, studying on all plans, but to make an earnest effort at organizing a liberal education for women, taking students at a

VASSAR COLLEGE—ALUMNÆ GYMNASIUM.

VASSAR COLLEGE—LABORATORY OF PHYSICS AND CHEMISTRY.

point where thorough education leaves off in existing ladies' seminaries and carrying them through a well-digested and well-balanced course of higher culture adapted to the sex."

President Raymond was born in New York in 1814. He was educated at Columbia and Union colleges; then pursued a course in theology at Hamilton, N. Y., after which he entered upon his work as a teacher. He was for fourteen years a member of the faculty at Madison University, for five years professor in the university at Rochester, president of the Brooklyn Polytechnic for nine years, and so was well prepared to guide a new institution through the dangers of its first years of existence.

Clear headed, judicious, sympathetic, enthusiastic, yet most careful in elaborating details, he seemed in every respect most admirably fitted to undertake the training and education of a body of young women. At the close of his first ten years of quiet work he was able to report that at least three results had been attained: The college had survived the perils of its infancy and had disappointed the predictions of skeptics; it had been true to the object of its founder that it should minister to woman's education and to that alone, and it had proved its ability to support itself. This success was due largely to the president's earnest effort and to his earnest belief in woman and in her abilities. His death occurred in the summer of 1878.

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DREW SEMINARY AND FEMALE COLLEGE, 1866.

[Furnished by the institution.]

Drew Seminary and Female College, located at Carmel, N. Y., was chartered by the legislature of New York, April 23, 1866, to promote the education of both sexes in literature, science, and the arts, and to furnish young women with a collegiate course of study. By the charter the trustees are to be appointed by the annual conference within whose jurisdiction the seminary is located.

For twenty-six years the high rank of the institution was due to the personal influence and efficiency of Prof. George Crosby Smith. Several years since the management of the school was committed to the Rev. James Martin Yager, D. D. Since then $12,000 have been expended in improvements. The building has been thoroughly renovated and painted within and put in excellent order. Students' rooms have been newly and well furnished.

Contracts have just been given for a new building, to be devoted to a gymnasium, class rooms, and music rooms, to cost $10,000. This new hall will be completed by February 1, 1896.

The standard of admission has been raised, and the preparatory, scientific, modern classical, and classical courses of study have been broadened.

Every room is at present (October 1, 1895) occupied, and the graduating class of 1896 will be the largest in the history of the institution.

It has never been a coeducational institution, and has for years been known as "Drew Ladies' Seminary."

In 1895 the collegiate charter was surrendered and a new academic charter granted.

RUTGERS FEMALE COLLEGE.

Until within a few years this has been the only college for women in the city of New York. Before its collegiate charter, which was granted by the legislature in 1867, it had an academic existence reaching back to the year 1838. It was known as the "Rutgers Female Institute." It has been claimed for this academy that it served as a model for the Packer Institute in Brooklyn and for the Buffalo Female Academy. That it met the real educational wants of the time is shown by the great numbers of students enrolled on its books from the very beginning.

THE COLLEGE.

Meanwhile the idea of colleges for young ladies providing a classical training and bestowing the ordinary college degrees upon their graduates had become somewhat familiar through the institutions of this type already in successful operation at Elmira and Leroy, in this State, and others in the West. The noble benefactions and extended

plans of the late Mr. Vassar at Poughkeepsie had now given a great stimulus to all such views, and the friends of Rutgers began to inquire whether the time had not come for the establishment of such a college in the metropolis, and whether the institution which had led the way in higher female education for the city during so many years were not alike fit and ready to take a new step and assume a new position. It possessed already a charter, an organization, and an honorable record of usefulness. It had long been and still was the only incorporated institution for young women in the metropolis. The multiplication of private schools and seminaries with the growth of the city seemed also to suggest a further advance if the institution would maintain that high and distinctive position which it had held at first. On all these grounds the step seemed wise, fitting, and timely. An application was therefore made to the legislature for a new charter giving the former institute the powers and privileges of a full college. It is due alike to the memory and the services of a lately deceased member of the board of trustees, Jeremiah Burns, esq., to state that he was very largely instrumental in the successful accomplishment of this important change, he having been among the first to propose it and having given a very great amount of time and personal attention to the several steps of its progress.

The college, duly chartered by the legislature, was authorized "to confer upon students at graduation the usual college degrees and also to bestow such honorary degrees, etc., as are granted by any university, college, or seminary in the United States, with the exception of such diplomas as entitle their recipients to practice medicine, law, or other specific professions." No degrees, however, were conferred by the college until 1870.

After several changes of location, the college is now situated in West Fifty-sixth street.

INSTRUCTORS AND STUDENTS.

In the year 1893 there were 34 students enrolled. The college has a corps of 15 instructors.

The president was then George W. Samson, D. D., LL. D.

In June 1895 the charter of Rutgers Female College was surrendered to the regents and the corporation dissolved.

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WELLS COLLEGE, 1868.

Wells College was founded at Aurora, N. Y., by Henry Wells, and opened for the reception of students in September, 1868. The insti-

tution was chartered in the same year, with full collegiate powers and privileges, by the legislature of the State of New York, under the name Wells Seminary. In 1870 the name was changed, on petition to the regents of the University of the State of New York, to Wells College, the better to express the real purpose of the founder in establishing the school. A preparatory department has been maintained from the first, but it will probably be dropped entirely at an early date. Announcement to this effect would have been made already had it not been for the interruption of our plans occasioned by the loss of the main building by fire, in August, 1888.[1]

BUILDINGS.

The main college building, which replaces the original building, was completed and occupied at the beginning of the collegiate year 1890–1891. It has a west front, overlooking the lake (Cayuga) of about 140 feet, with north and south wings, each extending back 160 feet, with a square tower, terminating in a graceful spire 160 feet in height, rising from the center of the structure. Besides rooms for resident teachers and students, it contains ample class rooms; library, with capacity for from 15,000 to 20,000 volumes; chapel, music hall, offices, and other public rooms, all on the first floor; gymnasium fitted with the Sargent apparatus, dining-room on second floor; a fine studio and society halls on the upper floor.[2]

PRESIDENTS.

The first president of Wells College was the Rev. William W. Howard, who held office only one year. From 1869 to 1873 the Rev. S. Irenæus Prime, D. D., was the acting president, and he was succeeded by the Rev. Thomas C. Strong, D. D., who resigned in 1875. The Rev. Edward S. Frisbee, D. D., was then elected as president, and he occupied the office until June, 1894.

Under his administration this institution has been steadily improving in all the appointments for study and instruction, and in a character for thorough scholarship and genuine literary and Christian culture.[3]

In the letter from President Frisbee above referred to attention is drawn to a peculiar feature in the policy of this institution. He writes:

A special point may be taken into the account, which was intended by the founder, and has been kept steadily in mind from the beginning, namely, the limitation of numbers. Originally the limit was placed at 75. For the last two years it has been considerably less, solely because since the fire we have been unable to provide room for a larger number. On the completion of the new building the limit will be raised to 100, experience showing that such number is not too large for the best results.

[1] From a letter of President Frisbee, of date March 6, 1890.

[2] Annual catalogue, 1891.

[3] Quoted from Public Service of the State of New York, III, p. 410.

In 1894 William Everett Waters, Ph. D., succeeded to the presidency.

BENEFACTORS.

Besides the large gifts of the founder, Wells College has received an endowment of $200,000 from the late Edwin B. Morgan, of Aurora, in addition to other donations from the same generous source.

COURSES OF STUDY.

Besides special courses, which are discouraged rather than recommended, there are three courses of study open to students: The regular course, the scientific course, the literary course. All have the same requirements for admission and all are of four years' duration, the first leading to the degree of A. B., the second to that of Bachelor of Science, the third to that of Bachelor of Literature. Special attention is given in Wells College to the study of the English language and literature.

ADDITIONAL FACTS.

Further information, especially of a bibliographical character, is contained in the following extract from a letter of President Frisbee, dated June 1, 1891:

The only acts of the legislature of this State which pertain to Wells College, rather the only act, is that of 1867 or 1868, incorporating "Wells Seminary" under a full college charter. A year or two later petition was made to the regents of the university of this State for a change of name to "Wells College," which was granted, but with no change of the charter.

Aside from the annual reports of the regents, the volumes of their reports from 1868 to 1870 contain the history of the foundation of Wells College.

The history of Wells College has not yet been written, and the material for it in published form is still more scanty, consisting as it does of pamphlets and newspaper reports of public occasions, very little of which in our possession survived the fire. The State library at Albany contains more of all such material than can be found at present elsewhere.

The late Dr. S. I. Prime, of the New York Observer, was one of our trustees at the time of his death, and was acting president of the faculty from 1869 to 1872 or 1873. The late Judge James Sheldon, of Buffalo, N. Y., was largely interested in the college, but I know of no biographical sketch of him, unless such a sketch may be found in the archives of the Buffalo Historical Society. The chief figures in connection with the foundation are Henry Wells, founder of the college, whose name is still retained in the firm title, Wells, Fargo & Co., and the Hon. Edwin B. Morgan, of Aurora, neither of whom is living.

CLAVERACK COLLEGE.

[From materials furnished by President Flack.]

HISTORICAL SKETCH.

Washington Seminary, the germ of the present institution, was founded by Maj. Henry Van Rensselaer, Col. Peter Van Ness, Mr. William Henry Ludlow, Rev. John G. Gebhard, and others, in 1779, and conducted as a successful English and classical school for nearly fifty years, having among its pupils many who have taken a prominent place in the history of the State and nation.

A stock company was formed in 1829 to erect a larger building, which was opened under the name of Claverack Academy in 1830, and chartered by the regents of the University of the State of New York during the following year. The academy flourished with its increased facilities for a quarter of a century, when the trustees, learning of other large seminaries springing up throughout the State, increased their capital to build and furnish the Claverack Academy and Hudson River Institute, which opened its doors October 10, 1854. To meet the wants of a large number of pupils another building, the College Hall, was added ten years later, and the 4th of June, 1869, power was given the trustees, by the regents of the university, to confer upon young women such degrees as are granted by other colleges for women in the State.

The centennial anniversary of the founding of Washington Seminary, as also the semicentennial, quadricentennial, and decennial anniversaries of the development of academy, institute, and college, were appropriately celebrated on the 14th of June, 1879.

BUILDINGS AND GROUNDS.

The site of the buildings is open, airy, and elevated, without bleakness. The grounds, containing 20 acres, consist of a shaded lawn in front and large level campus in the rear. There are two buildings used for educational purposes.

The main building, erected in 1854, contains the offices, parlors, library, reading rooms, chapel, dining hall, recitation rooms, music hall, practice rooms, society halls, studio, rooms for students and teachers, besides the apartments used for domestic and culinary purposes.

College Hall, erected in 1864, contains a large hall 50 by 80 feet, used for military drill and calisthenics, the armory, laboratory, day school room, gymnasium, and separate apartments for day pupils.

DESIGN.

The design of the institution is to furnish superior facilities for academic and collegiate study to young women, to prepare young men

for college, professional school, or business, and at the same time furnish them a comfortable, cultured Christian home.

There is also a conservatory of music and art.

Courses of study.

	Years.
Collegiate (for young women)	4
Academic	3
Latin, scientific	3
College, preparatory	3
Commercial	1
Music	4
Drawing, painting, and sculpture	3

In addition to the above, special courses are arranged to meet the wants of those who desire to prepare for any particular theological, technological, medical, law, or other professional school.

The president of the college is the Rev. A. H. Flack. In 1894 or 1895 the collegiate charter was revoked, and the institution now ranks only as an academy, under the name of the Hudson River Institute.

BARNARD COLLEGE.

[By the dean of the college, Miss E. J. Smith, 1894.]

HISTORY.

In 1883 a petition numerously signed by residents of New York and the vicinity was laid before the trustees of Columbia College, asking that the privileges of the college be extended to women in the form of coeducation. This petition was tabled by the trustees, but in the same year they took action to make the degrees of Columbia attainable by women who should be able to pass the necessary examinations. The resulting system, called the Columbia courses for women, proved unsatisfactory. The students found that they had the name without the thing, and the college authorities grew unwilling to confer, on the strength of examinations only, degrees which commonly rested on daily training as well. To ease the situation it was obviously necessary to provide instruction for the women which should be identical with or equivalent to that provided by Columbia for men, and in 1889 Barnard College was organized with this purpose in view. It will be noticed, therefore, that Barnard's relation to Columbia has developed in the opposite order to that customary in such cases. Girton and the other English colleges for women began by securing the benefit of instruction by members of the universities with which they are affiliated. The Harvard Annex in this country pursued the same policy. All these colleges are apparently as far as ever from obtaining the degrees of the universities, and the Harvard Annex, by becoming Radcliffe College, has virtually renounced the prospect.

In 1889 Barnard received a provisional charter, granted to Mrs. Francis B. Arnold, Rev. Arthur Brooks, Miss Helen Dawes Brown, Silas B. Brownell, Mrs. William C. Brownell, Mrs. Joseph H. Choate, Frederic R. Coudert, Noah Davis, George Hoadly, Hamilton W. Mabie, Mrs. Alfred Meyer, George A. Plimpton, Mrs. John D. Rockefeller, Jacob H. Schiff, Francis Lynde Stetson, Mrs. James S. T. Stranahan, Mrs. James Talcott, Rev. Henry Van Dyke, Miss Ella Weed, Everett P. Wheeler, Alice Williams, Frances Fisher Wood.

To meet the expenses of the college a number of persons pledged themselves to the payment of small annual sums for four years. The house was rented at 343 Madison avenue, which the college has occupied ever since. Seven instructors were selected from the Columbia faculty; 14 students entered in the school of arts and 12 as special students in science.

In the second year the botanical laboratory was equipped by the generosity of the Torrey Botanical Club. Nine additional instructors were appointed. The entry of each new class during the four years of experiment greatly increased the expense of the college, as it required an extension of the staff of instructors which the fees were far from meeting. Yet at the end of the four years the college found itself free from debt, with a graduating class of 8, 7 juniors, 10 sophomores, 27 freshmen, 33 special students, and 18 instructors. It had by this time received $100,000 for a building fund and $25,000 in $5,000 founderships, but was otherwise without income, save from its students' fees.

In January, 1894, the college sustained a great loss in the death of Miss Ella Weed, one of the original trustees, and, as chairman of the academic committee, the administrative head of the college. Miss Weed's very remarkable clearness of view and strength of purpose made her the ideal leader of an experimental enterprise, and she had the fortune to possess, together with sound ideas, the tact requisite to make them prevail. In view of the changes necessitated by her death, the trustees resolved to furnish the college with a formal head, and appointed, as the first dean, Miss Emily James Smith, a graduate of Bryn Mawr, who entered upon her duties in September, 1894. In June, 1894, the college received its permanent charter. During that year its building fund increased to $200,000, the number of $5,000 founderships rose to 7, and a sum not to exceed $12,500 annually was guaranteed for the payment of salaries for three years. In October, 1894, 127 students were registered, as follows:

Undergraduates	72
Graduates	19
Special students	36
	127

ACADEMIC STATEMENT.

The opening of the Harvard Annex in 1881 and of Barnard College in 1889 bear witness to the gradual growth in this country of the university idea. The independent colleges for women which have been so generously established in our Eastern States prove not only that the theory of the collegiate education of women is accepted in this country, and that the money is forthcoming to put it in practice, but that a very few years ago the existing colleges for men were not so good that there was any audacity in trying to duplicate them. In Europe it has never been seriously supposed that the University of Oxford or of Berlin could be reproduced for women. Thirty years ago it seemed credible that Harvard might be so reproduced. But within those thirty years the idea of concentrating ability and money in a great university here and there instead of scattering it broadcast, the idea of accumulating great university libraries instead of increasing the number of small collections which wastefully duplicate each other without rising above mediocrity, has prevailed and produced a great advance in American scholarship. In harmony with this idea, Barnard, although in possession of a charter and an administrative autonomy of its own, has the advantage of academic identity with Columbia. Instructors at Barnard are chosen from the staff of Columbia, or approved by the president thereof. Columbia is responsible for the Barnard examinations, the papers used at both colleges being identical, save in a few exceptional cases. Barnard students have equal privileges with Columbia students in the university library. In other words, the women of New York have an opportunity to receive precisely the same education as their brothers, to hear the same professors, to use the same books, to share the mental breadth that comes of life in a university as distinguished from a college, and are yet spared as undergraduates the problems that arise from coeducation in the narrow sense.

The caution with which both parties to the experiment have hitherto advanced, and the liberty left to the various faculties at Columbia of making their own terms of agreement with Barnard, results in a certain heterogeneity of relations. In the undergraduate course the instruction at Barnard College is identical with that at Columbia, though for reasons of practical convenience it is given to the women separately at Barnard College during the first three years. In the senior year a peculiarity of the Columbia system, by which graduate courses are open to election by seniors, takes many of the Barnard students to lectures at Columbia with the men. Of the twenty instructors in undergraduate work at Barnard, sixteen are on the Columbia staff.

The faculties of philosophy and of political science at Columbia have been authorized by the trustees to open their courses to auditors, with

the understanding that these may be either men or women. Auditors, as such, have no right to examination or other official recognition, but the students of Barnard have all such privileges under the general arrangement between the colleges. The faculty of philosophy, which has charge of the departments of philosophy and education, and of the oriental, Greek, Latin, Germanic, romance, and English languages and literatures, has used the authority given it by the trustees and opened 92 courses to students in Barnard College. The faculty of political science has never thrown open any of its courses to auditors, and its relation with Barnard offers a very interesting phase of the subject. Barnard contributes two professors to the common stock. Estimating their services in lectures at six hours each per week, the faculty fu[illegible]a [illegible]with twelve hours of lectures a week by a number of [illegible]ssors. Both institutions are obviously benefited. C[illegible]es its staff, and Barnard has the range of a departm[illegible] instead of being limited to its own two. This arran[illegible]s completed during the year 1894, went into effect in B[illegible]ied to women unusual advantages in the department o[illegible]nomic, and social study, supplemented by pra[illegible]tigation, for which New York City offers an e[illegible]

The Columb[illegible] have never received permission to open their c[illegible]nd the conditions under which Barnard students receive elective and graduate instruction in the subjects under the direction of this faculty shows a third aspect of Barnard's relations with Columbia. In mathematics an arrangement has been made similar to that with the faculty of political science. Barnard contributes one professor of mathematics to a total of three, and receives her share of their services. The lectures are delivered at Barnard College. In the natural sciences, the work in chemistry and zoology is done at Barnard by instructors in Columbia. In physics a special instructor is secured by Barnard, with the approval of Columbia. The botanical department is under the charge of the only professor appointed by Barnard who has no connection with Columbia, Professor Emily L. Gregory, Ph. D.

But under all these varying conditions a uniformity of standard is secured by the fact that Columbia awards all the degrees and establishes her own requirements, which must be met by every department. Special students are admitted only to courses in natural science and political science. After a four years' course in natural science, special students receive a certificate from Barnard College; special students in political science receive no testimonial beyond such personal statements as they may obtain from instructors.

The degrees and certificates awarded to students in Barnard College read as follows:

1. *Degree of Bachelor of Arts.*

Cvratores Collegii Colvmbiæ Neo Eborancensis omnibvs et singvlis ad qvos præsentes litteræ pervenerint salvtem. Sciatis nos —— —— qvæ exercitationes omnes ad gradvm Baccalavrei In Artibvs attinentes in Collegio Barnardino nostro rite ac legitime peregerit ad istvm gradvm provexisse eiqve omnia ivra privilegia et honores qvæ adsolent in tali re adtribvi dedisse et concessisse.

In cvivs rei plenivs testimonivm chiragraphis præsidis hvivs Collegii et decani Scholæ Artivm Liberalivm nec non sigillo nostro commvni diploma hocce mvniendvm cvravimvs.

Datvm Novi Eboraci die —— mensis ——.

Annoqve Millesimo Octingentesimo Nonagesimo.

—— ——, *Decanvs.*
—— ——, *Præses.*

2. *Degree of Master of Arts.*

Cvratores Collegii Colvmbiæ Neo-Eborancensis omnibvs et singvlis ad qvos præsentes litteræ pervenerint salvtem. Sciatis nos —— —— qvi exercitationes omnes ad gradvm Magistri in Artibvs attinentes rite ac legitime peregerit ad istvm gradvm provexisse eiqve omnia ivra privilegia et honores qvæ adsolent in tali re adtribvi dedisse et concessisse.

In cvivs rei plenivs testimonivm chirographo præsidis hvivs collegii nec non sigillo nostro commvni diploma hocce mvniendum cvravimvs.

Datvm Novi Eboraci die —— mensis ——.

Annoqve Millesimo Octingentesimo Nonagesimo.

—— ——, *Præses.*

3. *Degree of Doctor of Philosophy.*

Cvratores Collegii Colvmbiæ Neo-Eborancensis omnibvs et singvlis ad qvos præsentes litteræ pervenerint salvtem. Sciatis nos —— —— qvi exercitationes omnes ad gradvm Doctoris in Philosophia attinentes rite ac legitime peregerit ad istvm gradum provexisse eiqve omnia ivra privilegia et honores qvæ adsolent in tali re adtribvi dedisse et concessisse.

In cvivs rei plenivs testimonivm chirographo præsidis hvivs collegii nec non sigillo nostro commvni diploma hocce mvniendvm cvravimvs.

Datvm Novi Eboraci die —— mensis ——.

Annoqve Millesimo Octingentesimo Nonagesimo.

—— ——, *Præses.*

4. *Certificate of special course in Science.*

Barnard College, New York.

This is to certify that —— —— has fulfilled all the requirements and passed the examinations in the course in ——.

—— ——, *Dean.*

New York City,
——, 18—.

CHAPTER 7.

PROFESSIONAL AND TECHNICAL SCHOOLS.

Many of the professional schools in the State are departments in universities already described, and it has been thought that the attempt to give adequate histories of these schools would unduly extend the limits of this report.

Exception has been made, however, of two institutions, the Rensselaer Polytechnic Institute, at Troy, and the Teachers' College, at New York. The former holds such an important place in the growth of technological education in this country, and has had so profound an influence upon the development of the material resources of the United States, that it deserves a place even in this general history.

The Teachers' College likewise deserves special mention, because it is an unique institution in the heighth and breadth of its aim and in its remarkable success in reaching this aim.[1]

In order to give some idea of the extent of the work done in the State in professional and technical education a list is here given taken from Regents' Report 110, for the year 1896.

[1] The Teachers' College has, since this report was written, been incorporated in Columbia University.

List of professional and technical schools.

No.	Name.	City or village and county.	Incorporated.		Presiding officer of faculty (the title is dean except where another title is given after the name).	Net property.
			By regents or legislature.	Date.		
	LAW.					
1	New York University law school	New York		June 2, 1835	Clarence D. Ashley (acting)	$183,577.26
2	Union University, Albany law school	Albany	L.	Apr. 17, 1851	J. Newton Fiero	13,800.00
3	Columbia University, faculty of law	New York		May —, 1858	William A. Keener, M. A., LL. D.	581,250.00
4	Cornell University, college of law	Ithaca, Tompkins		June 16, 1886	Francis M. Finch, B. A., LL. D.	
5	University of Buffalo, Buffalo law school	Buffalo, Erie		May 9, 1887	Charles Daniels, LL. D	917.74
6	New York Law School	New York	R.	June 11, 1891	George Chase, LL. B.	47,271.89
7	Syracuse University, school of law	Syracuse, Onondaga		June 11, 1895	James B. Brooks, M. A., D. C. L.	692.00
	Total					827,508.89
	Average					137,918.15
	MEDICINE.					
1	Columbia University, College of Physicians and Surgeons.	New York	R.	Mar. 12, 1807	James W. McLane, M. D.	2,250,000.00
2	New York University medical college	do	L.	Feb. 11, 1837	Charles Inslee Pardee, M. D.	346,984.30
3	Union University, Albany medical college	Albany	L.	Feb. 16, 1839	Thomas Hun, M. D.	64,419.33
4	University of Buffalo, medical department	Buffalo, Erie	L.	May 11, 1846	Matthew D. Mann, M. A., M. D	159,839.05
5	Long Island College Hospital	Brooklyn, Kings	L.	Mar. 6, 1858	Alexander J. C. Skene, M. D. (president)	210,000.00
6	New York Homeopathic Medical College and Hospital.	New York	L.	Apr. 12, 1860	William Tod Helmuth, M. D., LL. D	288,608.65
7	Bellevue Hospital Medical College	do	L.	Apr. 3, 1861	William T. Lusk, M. D., LL. D. (president)	79,198.32
8	New York Medical College and Hospital for Women.	do	L.	Apr. 14, 1863	Henry M. Dearborn, M. D. (president)	3,832.97
9	Woman's Medical College of the New York Infirmary.	do	L.	Apr. 13, 1864	Emily Blackwell, M. D.	85,475.00
10	Eclectic Medical College	do	L.	Apr. 22, 1865	George W. Boskowitz, M. D	33,195.00
11	Syrian Protestant College, medical department	Beirut, Syria	E.	— —, 1867	Daniel Bliss, D. D. (president)	
12	Syracuse University, college of medicine	Syracuse, Onondaga	L.	Jan. 6, 1872	Henry D. Didama, M. D., LL. D.	63,235.89
13	New York Polyclinic Medical School and Hospital.	New York	L.	Nov. 15, 1882	John C. Wyeth, M. D. (president)	8,493.66
14	Niagara University, medical department	Buffalo, Erie	R.	Aug. 7, 1883	John Cronyn, M. D. (president)	37,377.00
15	New York Post-Graduate Medical School and Hospital.	New York	L.	May 25, 1886	D. B. St. John Roosa, M. D., LL. D. (president).	147,433.24
	Total					3,778,142.41
	Average					269,867.31

List of professional and technical schools—**Continued.**

No.	Name.	City or village and county.	Incorporated. By regents or legislature.	Incorporated. Date.	Presiding officer of faculty (the title is dean except where another title is given after the name).	Net property.
	PHARMACY.					
1	College of Pharmacy of the City of New York	New York	L.	Apr. 25, 1831		$121,222.56
2	Syrian Protestant College, department of pharmacy.	Beirut, Syria		— —, 1867	Daniel Bliss, D. D. (president)	
3	Union University, Albany college of pharmacy.	Albany		June 21, 1881	Willis G. Tucker, M. D., Ph. D. (president)	3,044.11
4	University of Buffalo, college of pharmacy	Buffalo, Erie		Mar. 8, 1886	Willis G. Gregory, Ph. G., M. D	4,815.56
5	Brooklyn College of Pharmacy	Brooklyn, Kings	L.	Apr. 21, 1886	Elias H. Bartley, B. S., Ph. G., M. D	3,400.00
	Total					132,482.23
	Average					33,120.56
	DENTISTRY.					
1	New York College of Dentistry	New York	L.		D	51,673.17
2	University of Buffalo, college of dentistry	Buffalo, Erie			tt, M. D., D. D. S	6,363.76
3	New York Dental School	New York	R.		rd, M. D	
	Total					58,036.93
	Average					29,018.46
1	New York Ophthalmic Hospital	New York	L.	May 20, 1879	Henry C. Houghton, M. D. (president)	100,504.14
	VETERINARY.					
1	New York College of Veterinary Surgeons	New York	L.	Apr. 6, 1857	Hermann M. Biggs, M. D. (president)	
2	American Veterinary College	do	L.	Apr. 29, 1875	Alexander F. Liautard, M. D., V. M	900.00
	Total					900.00
	Average					900.00
	THEOLOGY.					
1	Hartwick Seminary, theological department	Hartwick Seminary, Otsego.	R.	Aug. 13, 1816	Alfred Hiller, D. D	24,650.00
2	Hamilton Theological Seminary	Hamilton, Madison	L.	Mar. 5, 1819	Sylvester Burnham (dean)	
3	Auburn Theological Seminary	Auburn, Cayuga	L.	Apr. 14, 1820	Henry Matthias Booth, D. D., LL. D	951,293.99
4	General Theological Seminary of the Protestant Episcopal Church.	New York	L.	Apr. 5, 1822	Eugene Augustus Hoffman, D. D., D. C. L., LL. D. (dean).	3,069,988.00
5	Union Theological Seminary	do	L.	Mar. 27, 1839	Thomas S. Hastings, D. D., LL. D	2,022,000.00
6	German Martin Luther Seminary	Buffalo, Erie	L.	Aug. 26, 1853	Rev. John A. Graban (director)	14,804.00
	Rochester Theological Seminary	Rochester, Monroe	L.	Apr. 15, 1854	Augustus H. Strong, D. D., LL. D	767,087.22

8	St. Lawrence University, Canton Theological School.	Canton, St. Lawrence	L.	Apr. 3, 1856	Isaac Morgan Atwood, D. D	167,316.99
9	Alfred University, theological department	Alfred, Allegany	L.	Mar. 28, 1857	Boothe C. Davis, B. D., M. A	30,000.00
10	Christian Biblical Institute	Stanfordville, Duchess	L.	Apr. 16, 1868	John B. Weston, D. D	74,889.89
11	St. Bonaventure's College, theological department.	Allegany, Cattaraugus	R.	Mar. 1, 1875	Very Rev. Joseph F. Butler, O. S. F	40,000.00
12	Niagara University, Seminary of Our Lady of Angels.	Niagara University, Niagara.	R.	Aug. 7, 1883	Very Rev. Patrick MacHale, C. M	55,400.00
13	St. John's College, theological department	Brooklyn, Kings		Sept. 21, 1891	Very Rev. J. A. Hartnett, C. M	
	Total					7,217,430.09
	Average					656,130.01
	PEDAGOGY.					
1	Teachers College	New York	R.	Jan. 12, 1889	Walter Lowrie Hervey, Ph. D	996,500.50
2	New York University, school of pedagogy	do		Mar. 3, 1890	Edward R. Shaw, Ph. D. (dean)	257,000.00
3	New York State Normal College	Albany	R.	Mar. 13, 1890	William J. Milne, Ph. D., LL. D	215,762.38
4	University of Buffalo, school of pedagogy	Buffalo, Erie		—— —, 1895	Frank M. McMurry (dean)	22,797.06
	Total					1,492,059.94
	Average					373,014.98
	MUSIC.					
1	New York College of Music	New York	L.	Oct. 4, 1878	Alexander Lambert (director)	47,234.00
2	Grand Conservatory of Music	do	L.	May 23, 1884	Ernst Eberhard, Mus. D	416.25
3	Metropolitan College of Music	do	L.	Apr. 8, 1891	Dudley Buck	
4	American College of Musicians	do	R.	Feb. 28, 1895	Albert Ross Parsons	212.29
	Total					47,862.54
	Average					15,954.18
	TECHNOLOGY—POPULAR COLLEGES.					
1	Rensselaer Polytechnic Institute	Troy, Rensselaer	L.	Mar. 21, 1826	Palmer C. Ricketts, C. E	309,428.67
2	Cooper Union, night school	New York	L.	Feb. 17, 1857	George W. Plympton, M. A., C. E. (director)	1,690,000.00
3	Cooper Union, woman's art school	do	L.	do	Mrs. Susan N. Carter (principal)	
4	Columbia University, faculty of applied science	do		—— —, 1864	Chas. F. Chandler, M. D., Ph. D., LL. D. (dean)	1,120,000.00
5	Conrad Poppenhusen Association	College Point, Queens	L.	May 6, 1868		185,259.92
6	Chautauqua University		L.	Mar. 30, 1883	John R. Vincent (chancellor)	
7	New York State Library School	Albany		Jan. 5, 1887	Melvil Dewey, M. A. (director)	523,053.62
8	Pratt Institute	Brooklyn, Kings	L.	May 19, 1887	Frederic B. Pratt, B. A. (chairman)	3,550,802.39
9	New York Trade School	New York	R.	June 8, 1892		888,758.16
10	Rochester Atheneum and Mechanics' Institute	Rochester, Monroe	R.	do	E. C. Colby (principal)	44,265.32
11	Catholic Summer School of America	Plattsburg, Clinton	R.	Feb. 9, 1893		39,211.20
65	Total					8,350,779.28
	Average					927,864.36
	Grand total					22,005,706.45

TEACHERS' COLLEGE.

[Furnished by President Hervey.]

HISTORY AND PURPOSE.

It was the design of the founders of the Teachers' College to afford a place for the scientific study of the educational problems of the time; to create a more intelligent and active interest in public education, and to this end to train superintendents and teachers for all grades of schools. The work was undertaken by a group of men and women whose conception of what schools should teach was derived chiefly from the knowledge of what life requires; whose interest and aims were at first primarily philanthropic, but who later found that, of all roads to reform, education is the surest and most direct, and that in education the key to progress is the training of teachers.

Under the name New York College for the Training of Teachers, this institution received a provisional charter from the board of regents of the University of the State of New York, January 12, 1889. December 14, 1892, all the conditions of the provisional charter as to financial support, endowment, and educational standing having been fully met, the charter was made absolute, and the name was changed by mutual consent to Teachers' College. The first president was Nicholas Murray Butler, Ph. D., of Columbia College. He was succeeded in 1891 by the former dean of the faculty, Walter Lowrie Hervey, Ph. D.

The Teachers' College is a professional school, designed to equip intending teachers thoroughly for their profession and to afford to those who are already members of the profession opportunities for specialization and graduate study.

COURSES OF STUDY LEADING TO A DIPLOMA.

The diploma is granted only after a course two years in length. Certain courses in psychology and the history of education and in the science and art of teaching are required of all students as furnishing the foundations of professional training. In addition to these general studies each student, according as he elects to be a general teacher or a specialist, completes his program by following either the general course or a special course in one of the ten departments of the college, which are as follows: Psychology and the history of education, science and art of teaching, English language and literature, history, Latin and Greek; kindergarten, science, domestic science and art, manual training and art education, physical training.

Only graduates of accredited colleges are admitted without examination.

Students of both sexes are received.

TEACHERS' COLLEGE—MAIN BUILDING, MORNINGSIDE HEIGHTS.

TEACHERS' COLLEGE—MECHANIC ARTS BUILDING.

INTRODUCTORY COURSES AND TERMS OF ADMISSION.

As few students who are not college graduates have been found to possess the degree of preparation or maturity of mind necessary for the successful pursuit of professional studies, the college now offers an introductory course of two years. This course is designed to bridge the gap between the high school and the professional course. Its central study is English, as the central study of the professional course is psychology; the one is designed to prepare for the other. It is especially strong in all studies involving expression and constructive activity.

SCHOOL OF OBSERVATION AND PRACTICE.

In vital connection with the college there exists a school, known as the Horace Mann School, in which, under unity of plan and administration, every stage in the school life of a child—from the kindergarten through the high school—is represented, and the complete curriculum may be studied as an organic whole.

This school exists primarily for the purpose of affording to those pursuing the professional course an opportunity for observation and practice, but being under the personal superintendence of the heads of departments in the college, and having in addition a competent staff of professional teachers, it is able to prepare candidates for entrance to colleges, both literary and scientific, and to prepare for citizenship and the active duties of life.

ALLIANCE WITH COLUMBIA UNIVERSITY.

For the purpose of securing to the students of Columbia College, Barnard College, and the Teachers' College reciprocal advantages and opportunities, an agreement, taking effect July 1, 1893, was entered into between the above-named institutions. By the terms of this agreement certain courses of instruction in the Teachers' College are accepted by Columbia as counting toward the Columbia College degrees of A. B., A. M., and Ph. D. These courses pass under the charge of the faculty of philosophy of Columbia College, and the members of the faculty of the Teachers' College are represented on that faculty.

For persons actually engaged in the work of teaching, but who wish to pursue further courses of professional study in order to enable them to meet satisfactorily the demands made upon them by the continual expansion and elevation of the school curriculum throughout the country, Saturday classes are organized in the several departments of the college.

THE PUBLIC OPENING OF THE NEW BUILDINGS.

The new buildings on Morningside Heights were formally opened on "Founder's Day," November 15, 1894. The Outlook, in its issue of November 24, 1894, thus describes the event:

A notable event in the history of Greater New York was the formal opening of the new buildings of the Teachers' College in Morningside Park on Thursday

afternoon of last week. This institution is the pioneer of the group of colleges and public buildings which will shortly crown the noble heights which overlook the Hudson on the one side and the city, the East River, and Long Island on the other. The Teachers' College, by the evolution of sound ideas, of intelligent management, and of deep convictions, has become one of the foremost institutions in the country. Its specific aims and its special methods have been described in these columns. It is at last worthily housed, although only a part of its building plan has so far been realized. The position which it has already attained and the influence which it is already exerting are evidenced by the fact that, in taking possession of its new quarters, it was able to call to its aid, as interpreters of the occasion, the presidents of Harvard, Johns Hopkins, and Columbia universities, all of whom bore testimony to the advance in educational ideas which it represents.

GROWTH AND FINANCIAL STATUS.

Some idea of the growth [illegible] ers' College may be conveyed by the following [illegible] e by Rosa Belle Holt, appearing in the Cosmopo [illegible] h, 1894:

The Teachers' College h [illegible] ut a few years, and yet more than half of the States of the U [illegible] eign countries are represented on its rolls; there is not a railro[illegible] into New York City that does not regularly carry its students; the [illegible] plicants for admission exceeds the present accommodations, and t [illegible] r its graduates has always been greater than the supply.

The results of this rapid [illegible] esent financial status may be seen at a glance in the following [illegible] m the Teachers' College Bulletin:

"Trustees, 17; professors and inst [illegible] departments, 12; courses, 75.

"Teachers now in the field, 900; now in a [illegible] dance, 237; pupils in the school of observation and practice, 295.

"Total estimated current expenses for 1893–94, $69,000, of which $37,000 is expected to come from earnings, the remainder from donations. Number of donors, 1892–93, 55.

"Value of land, $150,000; main building, when completed, $350,000; gift of manual arts building, $225,000; estimated cost of western wing (not yet provided), for the departments of physical training, domestic science, and arts, $175,000."

AIMS IN FUTURE DEVELOPMENT.

The writer of the same article in her closing words, quoted below, shows some of the broader aims of the college for the future:

From its coigne of vantage on Morningside heights, the college will aim to widen its influence so as to reach not only the schools, but the homes. In addition to its proper function of offering a competent training to those upon whom devolves the most important work of superintending the education of the rising generation, it will endeavor, so far as it may be given support, to reach the mass of the people. It will endeavor to do this by offering popular lectures upon common themes, by holding mothers' meetings and fathers' meetings, and by opening after-school classes for the children and evening classes for the wage-earners, and in every way possible reach forward and extend its influence for good far and wide. By these methods of directly reaching the people, the trustees hope to make the college a center of light and power, and to make good the claim sometimes advanced in its behalf that it is the true type of "the people's college."

A SEWING LESSON IN THE PRIMARY CLASSES.

TEACHERS' COLLEGE—IN THE LIBRARY.

TEACHERS' COLLEGE—WOOD CARVING IN THE SCHOOLROOM.

INCORPORATION INTO COLUMBIA UNIVERSITY.

Teachers' College became, by an agreement dated February 28, 1898, a part of the educational system of Columbia University. The president of Columbia University is president, ex officio, of Teachers' College, and the university professors of philosophy and education and of psychology are members of the faculty of Teachers' College, which is in turn represented upon the university council by the dean and an elected representative of its faculty.

Teachers' College maintains its separate corporate organization, and its board of trustees continues to assume the entire financial responsibility for its maintenance.

Teachers' College is the professional school of Columbia University for the study of education and the training of teachers. It takes academic rank with the schools of law, medicine, and applied science. The purpose of Teachers' College is to afford opportunity, both theoretical and practical, for the training of teachers of both sexes for elementary and secondary schools, of specialists in various branches of school work, and of principals, supervisors, and superintendents of schools. Students of university grade and experienced teachers are afforded the most ample facilities for practical work, as well as for special study and research.

Columbia University accepts courses in education as part of the equipment required for the degrees of A. B., A. M., and Ph. D. Graduate students who prefer to devote their entire time to professional study and investigation may become candidates for the higher diploma of Teachers' College. The college diploma is conferred upon students who have successfully completed some one of the general courses, which are fully described in the announcement of Teachers' College for 1898–99; a departmental diploma upon those who have fitted themselves for particular branches of school work, and a certificate testifying to work actually performed upon students who have pursued partial courses. The course of study for intending teachers in secondary schools is so arranged that undergraduate students of Columbia and Barnard colleges may, if they so desire, receive the diploma of Teachers' College at the time of receiving the degree of bachelor of arts.

The Horace Mann School, fully equipped with kindergarten, elementary, and secondary classes, is maintained by Teachers' College as a school of observation and practice. It offers unexcelled advantages for the investigation of educational problems and for the study of the practical work of teaching.

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RENSSELAER POLYTECHNIC INSTITUTE.

[By PALMER C. RICKETTS, C. E., *Director of the Institute.*]

PURPOSE OF THE FOUNDER.

This institution, located at Troy, N. Y., was founded by the Hon. Stephen Van Rensselaer, of Albany, N. Y., in the year 1824, and was named at that time the Rensselaer School. It was incorporated by the legislature by act of March 21, 1826.

It was established as a school of practical science. The intention of its founder will be understood by quoting from a letter, dated November 5, 1824, written by him to the Rev. Dr. Blatchford, who was the first president of the school:

I have established a school at the north end of Troy for the purpose of instructing persons who may choose to apply themselves in the application of science to the common purposes of life. My principal object is to qualify teachers for instructing sons and daughters of farmers and mechanics, by lectures or otherwise, on the application of experimental chemistry, philosophy, and natural history to agriculture, domestic economy, the arts, and manufactures.

And in a circular of the school issued in 1826 the following clause occurs:

The Rensselaer School was founded by the Hon. Stephen Van Rensselaer solely for the purpose of affording an opportunity to the farmer, the mechanic, the clergyman, the lawyer, the physician, the merchant, and in short, to the man of business or of leisure, of any calling whatever, to become practically scientific.

In the letter above referred to a board of trustees was appointed, articles for the temporary government of the school were enunciated, and Amos Eaton, of Troy, was made senior professor. The first meeting of the board of trustees occurred on the 29th of December, 1824, at which time the name Rensselaer School was given to the institution. It was opened on the 5th of January, 1825, and an act of incorporation was passed by the legislature March 21, 1826.

The usefulness of the school was extended in this year by the establishment of what was called a "preparation branch," the object of which was fully enunciated in the circular of 1826, from which a quotation has already been made.

As this circular is the first prospectus of a school of science ever issued in the English language, and as there may be drawn from it interesting inferences in relation to the state of scientific knowledge in this country at that date, it is given verbatim:

PREPARATION BRANCH RECENTLY ESTABLISHED AT RENSSELAER SCHOOL.

From a respect for the frequent solicitations of many gentlemen in the Southern States, and of some in the Northern, and from a desire expressed by the patron, to see the results of an extension of his plan, a *preparation branch* was this day established at this school, to go into operation on the third Wednesday in November.

Observatory. Laboratory. Main building. Gymnasium.

RENSSELAER POLYTECHNIC INSTITUTE.

The following is an outline of the Plan.

1. The original method of instruction which has produced such unexpected results, called the Rensselaerean method, will be extended to this branch; to wit, that of exercising the student, on the forenoon of each day, by causing him to give an *extemporaneous dissertation* or *lecture* on the subject of his course, from concise written memoranda: and to spend the afternoon in *scholastic amusements.*

2. The circle of instruction is divided into five parts; and to each part is attached a course of *summer* and *winter* afternoon amusements. The following order will be observed in the fall and winter terms. In the spring term it will be inverted.

First Division. BOTANY and ETYMOLOGY. (The latter branch will extend to so much knowledge of the structure of the Latin, Greek, and French languages, as will enable the student to trace scientific terms to their themes, which are derived from those languages.) AMUSEMENTS. For *summer.* Collecting and preserving minerals, plants and insects. For *winter* none, as this division will not be studied in the winter.

Second Division. GEOGRAPHY and HISTORY. AMUSEMENTS. For *summer.* Selecting specimens for illustrating the physiology of vegetation, and examining them under the common, and the solar, microscopes, and making drawings of their internal structure. For *winter.* Each making a globe of plaster of Paris, and drawing the chief subjects of geography upon it.

Third Division. Elements of PRACTICAL MATHEMATICS and of MORAL PHILOSOPHY. AMUSEMENTS. For *summer.* Land-surveying, taking the latitude, and performing simple hydraulic experiments. For *winter.* Making and using a set of mechanical powers, exercises in percussion with suspended balls, guaging, measuring cordwood and timber.

Fourth Division. LOGIC and RHETORIC. AMUSEMENTS. For *summer.* Experimenting upon the most common gases, as oxygen (obtained from vegetables by the action of light) nitrogen, hydrogen, carbonic acid (with its combination in soda-water) testing their specific gravities, &c. and experimenting upon aqueous exhalations—all to be performed with apparatus made with their own hands. For *winter.* Making and using galvanic batteries and piles, electrometers and magnets; and disengaging combined caloric by compression and affinity.

Fifth Division. Elementary principles of GOVERNMENT and LAW, and PARLIAMENTARY RULES. AMUSEMENTS. For *spring* and *fall.* Constructing dials, fixing meridians, constructing and using air-thermometers and hygrometers, taking specific gravities, using the blow-pipe and constructing the three elementary musical chords to illustrate the science of tones. For *winter.* Making camera-obscura boxes; producing focal images by a pair of common burning glasses and ice lenses, and illustrating the microscope and telescope by the same: illustrating the laws of refraction and reflection by cheap mirrors and vessels of water, and separating the coloured rays by ice cut into triangular prisms.

Candidates are admitted to the preparation branch, who are deemed of sufficient discretion for going through the course, provided they have been successfully taught in reading, writing, common arithmetic and English grammar. The Faculty of Rensselaer School are to judge upon their qualifications: but the Trustees have, in the second article of the by-laws of this branch, expressed an opinion, that "the age of thirteen or fourteen years and upwards, is best adapted to this course."

EXPENSES. *Tuition* $1 50 cents for every three weeks, which constitutes a step in the circle. Students may enter either step in the circle at the commencement of every three weeks, reckoning from the beginning of each term. The terms or sessions of this branch, correspond with the other terms of the School. *Board,* in commons with the other students, never to exceed $1 50 per week. Rooms will

be furnished at or near the school, to be under the inspection and control of the faculty, at a small expense. No charge is made for the use of public rooms, library, chemical and philosophical apparatus, tools of the workshop, or the cabinet. And each student will attend the daily lectures of the Professors, free of charges. A student of strict prudence, may pay all his expenses for the 42 weeks in each year, at this branch, with $120, as follows: Tuition $21: board $63: fuel and lights $10: washing and lodging $10: text books $6: amusement apparatus, $10.

As this circular may fall into the hands of some, who have not read the new code of by-laws, passed April 3d, 1826, and the legislative act of incorporation, passed March 21st, 1826, it may be advisable to state as follows:

The Rensselaer School was founded by the Honorable Stephen Van Rensselaer, solely for the purpose of affording an opportunity to the farmer, the mechanic, the clergyman, the lawyer, the physician, the merchant, and in short, to the man of business or of leisure, of any calling whatever, to become *practically scientific*. Though the branches which are not taught here, are held in high estimation, it is believed that a school attempting every thing, makes proficients in nothing. The Rensselaer School, therefore, is limited to an EXPERIMENTAL COURSE in the NATURAL SCIENCES. The studies of the preparation branch are extended no farther than is necessary, as auxiliaries to the experimental course.

The FALL TERM commences on the third Wednesday in July, and continues 15 weeks.

The WINTER TERM commences on the third Wednesday in November, and continues 12 weeks.

The SPRING TERM commences on the first Wednesday in March, and continues until the last Wednesday in June; which is the day of the annual commencement.

EXPENSES. All the same as in the preparation branch, with the addition of double the charge for tuition in the fall and spring terms, on account of the great additional labor required for teaching the student to perform with his own hands about sixteen hundred experiments in chemistry and natural philosophy. But students who have gone through a course in the preparation branch with success, will not be required to attend the winter term. This will reduce the necessary expenses to about $95 for the whole experimental course.

Many unsuccessful attempts have been made to render science amusing to the youthful mind. They have generally proved very unprofitable, by diverting the attention of the student from literary pursuits, and by creating an attachment to useless, and often demoralizing sports. By the plan adopted at this school, the objections to scholastic amusements are effectually obviated: and it will appear by this circular, that those have been selected, which will give due exercise to both body and mind. The muscular powers of the body will be called into action, and their forces will be directed by mental ingenuity, until the student becomes familiar with the most important scientific manipulations, and particularly with those which will be most useful in the common concerns of life.

The Rensselaerean scheme for communicating scientific knowledge had never been attempted on either continent, until it was instituted at this school, two years ago. Many indeed mistook it, at first, for Fellenberg's method; but its great superiority has now been satisfactorily tested by its effects. As the *experimental school*, as well as the *preparation branch*, were founded solely for the public benefit by its disinterested patron, it is the particular desire of the trustees, that its excellences should be understood and imitated at other schools, as set forth in a former circular. Like other useful inventions, much expense was required for making the first experiment. Fortunately for science, the trial has been fairly made at the expense of many thousands, advanced by a single indi-

vidual. Now it may be followed, in its chief advantages, by every school district: while the parent school at Troy will prepare competent teachers.

By order of the Trustees.

SAMUEL BLATCHFORD, *President.*

Rensselaer School, Troy, (N. Y.) Sept. 14, 1826.

OFFICERS OF THE SCHOOL.

PATRON.

Hon. Stephen Van Rensselaer, with the power to appoint all Examiners.

TRUSTEES,

Surveyor Gen. S. De Witt and Prof. T. R. Beck, of Albany—Hon. J. D. Dickinson and Hon. R. P. Hart, of Troy—Rev. Dr. Blatchford and E. Parmelee, Esquire, of Lansingburgh—Hon. G. Van Schoonhoven and Hon. J. Cramer, of Waterford.

FACULTY,

Rev. S. Blatchford, President,—A. Eaton, Sen. Prof.—L. C. Beck, Jun. Prof.

AUXILIARY OFFICERS,

Dr. Moses Hale, Sec'ry.—Mr. H. N. Lockwood, Treas.—T. Dwight Eaton, Monitor and Librarian.—Asahel Gilbert, Steward.—Cyrus A. Lockwood, Esquire, Acting Steward.

AMOS EATON.

A slight digression is necessary to give a short account of one whose remarkable powers as a teacher of science insured its early success. Amos Eaton, the first senior professor, was born at Chatham, N. Y., in 1776. He gave evidence at an early age of superior ability and aptitude in the acquirement of scientific knowledge. At the age of 16, with homemade instruments, he had become a practical surveyor, and in 1799 graduated at Williams College with a high reputation for his scientific attainments. Although he at first studied law and was admitted to the bar in 1802, he never lost his interest in natural sciences, and abandoning his profession went to Yale College in 1815 to more thoroughly fit himself for scientific pursuits. He had given in 1810 a course of popular lectures on botany, and in 1817 returned to Williamstown to give lectures to volunteer classes in botany, mineralogy, and geology. Giving evidence here of his value as a teacher, and of his remarkable power of exciting the interest and enthusiasm of students, he determined to deliver a series of popular lectures throughout New England and other States. This was done with great success. According to Prof. Albert Hopkins he was one of the first to popularize science in the Northern States. In 1820 he was appointed professor of natural history in the Medical College at Castleton, Vt., and in this and the following year made, under the patronage of Stephen Van Rensselaer, geological and agricultural surveys of Albany and Rensselaer counties in the State of New York. There was thus acquired a knowledge of his capabilities which secured his appointment as senior professor in the Rensselaer Institute. He left the imprint of genius upon this school, and died at Troy in 1842.

He was not only an able teacher, but a scientific investigator and explorer as well. His practical work and writings attest this. His first work, a treatise on botany, was published in 1810, and his last, on geology, in 1841. He wrote on botany, zoology, chemistry, geology, and surveying. The different editions of his various books amount in all to about 40 publications.[1]

DEPARTMENT OF MATHEMATICAL ARTS ESTABLISHED.

By an act of the legislature passed in 1832 the name of the institution was changed from the Rensselaer School to the Rensselaer Institute, and in 1833 by the same authority the trustees were empowered to establish a department of mathematical arts for the purpose of giving instruction in engineering and [illegible]nology.

From its inception to this time [illegible]itution has been a school of natural science, its graduates re[illegible]e degree A. B. (r. s.).

A consideration of the condition o[illegible] country and of the state of scientific knowledge as applied to [illegible]onstructive arts toward the beginning of the century shows wh[illegible] was the case. At the time of the foundation of the school it co[illegible]rdly be said that there were in this country any engineers oth[illegible]n military engineers. But few miles of canal had been bui[illegible]ie canal having been begun in 1817. There were no railroa[illegible]rst one having been opened in 1830. The term civil enginee[illegible]lly been coined. The inclusion, therefore, among the duties of t[illegible] senior professor, in the first triennial catalogue, published in 1828, of lectures on civil engineering is significant of the broad and enlightened views of the founder and officers of instruction.

The foundation of the department of mathematical arts resulted in the establishment of a course in civil engineering, and eight members of the class of 1835 received the degree of civil engineer (C. E.). This was the first class in civil engineering graduated in any English-speaking country. There follows a copy of a notice dated October 14, 1835, in which the curriculum of the engineer corps is set forth. It is interesting not only because it is the first prospectus of a school of civil engineering ever issued in English, but because it adds to our information of the state of applied science in this country at that date. A more striking indication than this notice of the advancement, during the last sixty years, in the application of scientific knowledge to the development of the constructive arts can hardly be given. This is especially the case with those parts of it relating to the conferring of degrees, where it is stated that the degree of civil engineer is conferred on candidates of 17 years or upward, and that one year is sufficient for obtaining the degree. Also that graduates of colleges may succeed in obtaining it by close application during

[1] See Nason's Biographical Record of the Officers and Graduates of the Rensselaer Polytechnic Institute, and Durfee's History of Williams College.

RENSSALAER POLYTECHNIC INSTITUTE—MAIN BUILDING.

the twenty-four weeks in the summer term. It is to be remembered that civil engineering meant at that time all branches of engineering other than military.

FIRST CIVIL ENGINEERING PROSPECTUS.

NOTICES OF RENSSELAER INSTITUTE,

Troy, N. Y., October 14, 1835.

[Being the answer to letters of inquiry.]

HON. STEPHEN VAN RENSSELAER, PATRON, with the right to appoint the Annual Board of Examiners.

ACTING FACULTY.

Rev. E. NOTT, D. D., President—also President of Union College.

Judge DAVID BUEL, Jr., Vice President.

AMOS EATON, Senior Professor, and Professor of Civil Engineering; also holding the Agency and Supervision of the Institute.

EBENEZER EMMONS, Junior Professor.

JAMES HALL, Professor of Chemistry and Physiology.

Assistants—EDWARD SUFFERN and D. S. SMALLEY.

Instruction, wholly practical, illustrated by Experiments and Specimens, is given 40 weeks in each year. Five days in each week the forenoon exercises are from 8 A. M. to 1 P. M.

WINTER SESSION commences the third Wednesday in November, and continues 16 weeks. During the first 12 weeks, each forenoon is devoted to practical Mathematics, Arithmetical and Geometrical. This is a most important course for men of business, young and old. During the last 4 weeks of the Winter Term, extemporaneous Speaking on the subjects of Logic, Rhetoric, Geology, Geography and History, is the forenoon exercise. Throughout the whole session the afternoon exercises are Composition, and, in fair weather, exercises in various Mathematical Arts. A course of Lectures on National and Municipal Law, is given by the Senior Professor.

SUMMER SESSION commences on the last Wednesday in April, and continues 24 weeks: ending with Commencement.

Students of the Natural Science Department are instructed as follows:

Three weeks, wholly practical Botany, with specimens.

Four weeks, Zoology, including organic remains; and Physiology, including the elements of Organic Chemistry.

Three and a half weeks, Geology and Mineralogy, with specimens.

Three weeks, traveling between Connecticut River and Schoharie Kill, for making collections to be preserved by each student, and exhibited at examinations; also for improving in the knowledge of Natural History and Mathematical Arts.

Ten weeks, Chemistry and Natural Philosophy.

Half a week, preparing for examination and Commencement.

The afternoons of all fair days are devoted to Surveying, Engineering, and various Mathematical Arts—also to Mineralizing, Botanizing, and to collecting and preserving subjects in Zoology.

Students of the Engineer Corps are instructed as follows:

Eight weeks, in learning the use of Instruments; as Compass, Chain, Scale, Protractor, Dividers, Level, Quadrant, Sextant, Barometer, Hydrometer, Hygrometer, Pluviometer, Thermometer, Telescope, Microscope, &c., with their applications to Surveying, Protracting, Leveling, calculating Excavations and Embankments,

taking Heights and Distances, Specific Gravity and Weight of Liquids, Degrees of Moisture, Storms, Temperature, Latitude and Longitude by lunar observations and eclipses.

Eight weeks, Mechanical Powers, Circles, Conic Sections, construction of Bridges, Arches, Piers, Rail-Roads, Canals, running Circles for Rail-Ways, correcting the errors of long Levels, caused by refraction and the Earth's convexity, calculating the height of the Atmosphere by twilight, and its whole weight on any given portion of the Earth, its pressure on Hills and in Valleys as affecting the height for fixing the lower valve of a Pump; in calculating the Moon's distance by its horizontal parallax, and the distances of Planets by proportionals of cubes of times to squares of distances.

Four weeks, in calculating the quantity of Water per second, &c., supplied by streams as feeders for Canals, or for turning Machinery; in calculating the velocity and quantity effused per second, &c., from flumes and various vessels, under various heads; the result of various accelerating and retarding forces of water flowing in open race-ways and pipes of waterworks, and in numerous miscellaneous calculations respecting Hydrostatics and Hydrodynamics.

Four weeks, study the effect of Steam and inspect its various applications—Wind, as applied to Machinery; also Electro-Magnetism—inspect the principal Mills, Factories, and other Machinery or works which come within the province of Mathematical Arts; also, study as much Geology as may be required for judging of Rocks and Earth concerned in construction.

Fees for instruction, including all Lectures, Experiments, &c.; also for use of Instruments, Apparatus, Library and Specimens, $4 for each sub-term of four weeks. No student received for less than a sub-term. No extra charge excepting $8 for the course of Experimental Chemistry, where each student gives a course of experiments with his own hands.

Students furnish their own fuel, light, and text-books. Each boards where he pleases; but the Professors will aid strangers in the selection of boarding houses. A small number of strangers are boarded at the School at $2 per week; they furnish their own bedding, washing, &c.

The Rensselaer degree of Bachelor of Natural Science is conferred on all qualified persons of 17 years or upwards. The Rensselaer degree of Civil Engineer is conferred on candidates of 17 years and upwards, who are well qualified in that department. This power was given to the President, by an amendment to the Charter, passed last session of the Legislature. Candidates are admitted to the institute who have a good knowledge of Arithmetic, and can understand good authors readily, and can compose with considerable facility.

After a trial of two seasons, it is found to be inexpedient to enter young lads in the regular divisions, before they have sufficient pride of character to govern their conduct when preparing for their exercises in the absence of a teacher; arrangements will therefore be made for having a teacher always present with them, when they are not in the immediate charge of a Professor or Assistant.

Students in any one department have the right to attend one Experimental Lecture each day in the other departments, free of expense.

One year is sufficient for obtaining the Rensselaer degree of Bachelor of Natural Science, or of Civil Engineer, for a candidate who is well prepared to enter. Graduates of Colleges may succeed by close application during the 24 weeks in the Summer term.

Candidates may commence the course at the beginning of any sub-term; but the third Wednesday of November is to be preferred unless the candidate is a graduate of a regular College, or otherwise well instructed in general Mathematics and Literature. In such cases the last Wednesday in April is the most suitable time of entering. His theoretical views may then be reduced to practice during the Summer course.

The degree of Master of Arts is conferred after two years of practical application.

Gentlemen wishing to learn the outline of the terms of the Rensselaer Institute, are requested to pay postage on their letters; and they will receive this printed notice. If this appears to be a "*narrow notice*," I will state that I paid $54.28 in one year in postage for letters on others' business: some for our school course, more for advice about mines, minerals, and visionary projects.

AMOS EATON, *Agent.*

Rensselaer Institute, Troy, Oct. 14, 1835.

Upon the death of Amos Eaton, in 1842, George H. Cook, of the class of 1839, afterwards widely known for his work as State geologist of New Jersey, became senior professor. Under his direction the school was reorganized and the courses of instruction somewhat extended. He resigned in 1847 and was succeeded by B. Franklin Greene, of the class of 1842, who became director of the institution when that office was created by act of legislature in 1850.

REORGANIZATION OF THE SCHOOL.

His acceptance of the position marks an epoch in the history of the school. After a careful study of the scientific and technical institutions of Europe, the curriculum was, under his direction, thoroughly reorganized in 1849. This reorganization included a material enlargement of the course of study and the requirement of a more rigid standard of scholarship from candidates for degrees. The number of instructors was also increased and the length of time devoted to the course was changed to three years, with a "preparatory class," which made it practically four years in duration. The graduating or senior class was called Division A, and the others Divisions B and C. In 1858 the preparatory class was merged into the regular course under the name of Division D.

Professor Greene published in 1856 a pamphlet of 84 pages entitled The Rensselaer Polytechnic Institute. Its Reorganization in 1849–50—Its Condition at the Present Time—Its Plans and Hopes for the Future. This, as its title indicates, was descriptive of the reorganization. Two paragraphs are quoted from it to show more clearly the character of the changes and the intentions of the authorities:

The managers of the institute therefore resolved that their field should be narrowed and more thoroughly cultivated; that, indeed, their educational objects should be restricted to matters immediately cognate to architecture and engineering; that, moreover, for a somewhat irregular and for the most part optional course, requiring but a single year for its accomplishment, they would substitute a carefully considered curriculum, which should require at the least full three years of systematic and thorough training, and that, finally, they would demand the application of the strictest examination tests to the successive parts of the course prescribed, not only in respect to the translation of students from lower to higher classes, but especially in all cases of ultimate graduation with professional degrees.

It was in accordance with such views as these that, in 1849–50, this institution

was wholly reorganized upon the basis of a general polytechnic institute, when it received the distinctive addition to its title, under which it has since been more or less generally known.

It will be seen from the last paragraph that the name Rensselaer Polytechnic Institute was first used in 1849–50. This change was ratified by an act of the legislature passed April 8, 1861.

Thus were inaugurated the course and methods which have resulted in giving to the engineering profession of this and other countries during the last forty years many of its most distinguished members. The main causes of the reputation of the school and of the success of its graduates have been the method of instruction then adopted and the high standard of scholarship maintained. Although the curriculum has of course since been changed from time to time to adapt it to the needs of the best modern practice, the methods have remained practically unchanged.

The classes are divided into small sections and each student is required to recite each day in every subject. Text-books, supplemented by lectures and explanations, are used whenever the nature of the case permits. The students are not only interrogated, but in almost all subjects are required to make blackboard demonstrations. After the material constituting each term's work has been finished, a review in all subjects follows and afterwards an examination. Close records of the work done each day are kept, and the success of the student in passing in any subject depends largely upon these daily records.

PRESIDENTS AND DIRECTORS.

Director B. Franklin Greene resigned in 1859, and his position was occupied until 1860 by Nathan S. S. Beman, D. D., who was at that time president of the board of trustees.

The names of the presidents and directors and the years during which they served, from the foundation of the school to the present time, are here given:

PRESIDENTS.

Rev. Samuel Blatchford, D. D., first president	1824–28
Rev. John Chester, D. D., second president	1828–29
Eliphalet Nott, D. D., LL. D., third president	1829–45
Nathan S. S. Beman, D. D., fourth president	1845–65
Hon. John F. Winslow, fifth president	1865–68
Thos. C. Brinsmade, M. D., sixth president	1868–68
Hon. James Forsyth, LL. D., seventh president	1868–86
John Hudson Peck, LL. D., eighth president	1888–

SENIOR PROFESSORS AND DIRECTORS.

Amos Eaton, A. M., senior professor	1824–42
George H. Cook, C. E., Ph. D., senior professor	1842–46
B. Franklin Greene, C. E., A. M., director	1847–59
Nathan S. S. Beman, D. D., director	1859–60
Charles Drowne, C. E., A. M., director	1860–76
William L. Adams, C. E., director	1876–78
David M. Greene, C. E., director	1878–91
Palmer C. Ricketts, C. E., director	1892–

REQUIREMENTS FOR ADMISSION.

The requirements for admission to the institute have been in the past, and are at present, somewhat elementary in their character. In this, as in some other respects, it resembles the United States Military and Naval academies. The cause has been the necessity of thorough preparation in elementary branches of mathematics, which experience has taught can not generally be expected from students who have received their mathematical training in the secondary schools of this country. For this reason, besides the usual English branches, arithmetic, plane geometry, and algebra through quadratic equations only are required for admission. Local examinations for entrance are provided in a few schools of high grade in various parts of the country.

NUMBER AND LENGTH OF TERMS.

Each year is divided into two terms of about nineteen weeks each, and examinations are held at the end of each term. Besides this, students of Divisions C and B, which correspond to the sophomore and junior years of academic schools, go into the field during the month of July for instruction in practical surveying of various kinds. This is in addition to the surveying required during other parts of the course.

COURSES OF INSTRUCTION.

The principal course of instruction given is that in civil engineering, and the degree conferred is civil engineer (C. E.). It is to be distinctly understood, however, that the instruction is not narrowed to any special branch of civil engineering. The design of steam engines, as well as that of bridges, sewerage systems, waterworks, etc., is taught, and the student receives instruction as well in the principles of electrical engineering as in the location and construction of roads and railroads. There is also given a course in natural science, upon the satisfactory completion of which the degree of Bachelor of Science (B. S.) is conferred.

Special practical courses in chemistry and assaying and in surveying and railroad engineering are given during the summer vacation. That in chemistry and assaying is six weeks in duration, and includes either qualitative or quantitative analysis as may be desired. The course in surveying and railroad engineering is given in the field between June 1 and July 1, and is therefore four weeks in duration. Some healthful part of the Adirondack region in the northern part of this State is chosen for the work. A special winter course of lectures on highway engineering and road construction is also given. These lectures are not technical in their character, being intended for those who, without an advanced special training, are engaged or interested in the construction and maintenance of country roads.

SCHEDULE OF THE COURSE IN CIVIL ENGINEERING.

FIRST YEAR.

First term.—Solid geometry; algebra; French; projections, theory; projections, drawing; freehand drawing; plane problems; elements of drawing; pen topography.

Second term.—Trigonometry; physics; French; surveying, theory; surveying, practice; colored topography; bridge drawing.

A thesis must be written during the summer vacation.

SECOND YEAR.

First term.—Physics; logic; descriptive geometry, theory; descriptive geometry, drawing; analytical geometry; surveying, theory; surveying, practice; physical experiments.

Second term.—Chemistry, theory; chemistry, lectures; differential calculus; surveying, theory; shades and shadows, theory; shades and shadows, drawing; perspective, theory; perspective, drawing; freehand drawing, lettering.

A thesis must be written during the summer vacation. A four weeks' course in surveying during the month of June is required.

THIRD YEAR.

First term.—Integral calculus; rational mechanics; geodesy; highway engineering; chemistry, qualitative analysis; mineralogy; electricity and magnetism; map drawing.

Second term.—Rational mechanics; structures; railroad engineering, theory; astronomy; machine construction, theory; machine construction, plates; chemistry, blowpipe analysis; assaying.

A thesis must be written during the summer vacation. A four weeks' course in railroad engineering during the month of June is required.

FOURTH YEAR.

First term.—Machines; resistance of materials; hydraulics; sewerage; bridges and roofs; economic theory of railroad location; practical astronomy, theory; practical astronomy, observations; metallurgy; physical laboratory work.

Second term.—Bridge design; hydraulics; hydraulic motors; thermodynamics; steam engineering; stonecutting, theory; stonecutting, plates; electrical engineering; physical laboratory work; geology; law of contracts.

A graduating thesis must be presented.

SCHEDULE OF THE COURSE IN NATURAL SCIENCE.

The studies of the course in natural science are identical with those in civil engineering during the first two years.

THIRD YEAR.

First term.—Calculus; electricity and magnetism; mineralogy, petrography; map drawing; chemistry, qualitative analysis, elementary quantitative analysis.

Second term.—Astronomy; geology, lithology; histology; chemistry, organic; blowpipe analysis; assaying.

A thesis must be written during the summer vacation.

RENSSELAER POLYTECHNIC INSTITUTE—CHEMICAL LABORATORY.

FOURTH YEAR.

First term.—Metallurgy, general metallurgy, iron metallurgy; chemistry, quantitative analysis, analysis of commercial and industrial products; physical laboratory work.

Second term.—Physical laboratory work; paleontology; mineralogy, determinative; petrography; chemistry, quantitative analysis, volumetric and gravimetric analysis; law of contracts.

A graduating thesis must be presented.

MATHEMATICS AND ASTRONOMY.

The aim of the department is to give each student a thorough working knowledge of the several subjects taught. The courses are made to bear as directly as possibly upon the training of the engineer. During the first year thorough instruction is given in solid geometry, higher algebra, and trigonometry. These are followed by analytical geometry and differential calculus in the second year, and by integral calculus in the third. Lectures on the theory and various forms of the slide rule are also delivered. In all these subjects examples of a practical nature are constantly given. The text-books used are supplemented by notes prepared by the instructors.

A course in descriptive astronomy is given in the third year, and that in spherical and practical astronomy in the fourth. In the latter are considered the adjustment and use of portable instruments, correction of observations, determination of time, latitude, longitude, and the meridian, the method of least squares, and similar subjects. The theory is supplemented by work in the observatory, where the use of the sextant, chronograph, transit instrument, etc., is taught.

DESCRIPTIVE GEOMETRY AND STEREOTOMY.

In this department careful and thorough instruction is given in free-hand drawing, lettering, the use of drawing instruments, tinting, shading, isometric and orthographic projections, tracing and making blue prints, the theory and practice of shades, shadows and perspective, machine construction and drawing, including gearing and the slide valve, and stonecutting. In all these subjects a great amount of time is spent in the drawing room under the immediate supervision of the instructor, and original work sufficient to fix the principles is required. In descriptive geometry, for instance, although a lesson is assigned for each day from the text-book, the student is seldom given a problem found there, but is required to prove an original one illustrating the same principles. Besides the drawing required in the course in stone-cutting, plaster of paris models of arches, stairways, etc., are constructed by the students.

CHEMISTRY.

The course in chemistry, which is obligatory for all students, consists of daily lectures during the last part of the second year upon

general inorganic chemistry. These are accompanied by daily recitations, including the solution of chemical problems.

The course in qualitative analysis extends over the first half of the third year, with laboratory work five days in each week. During this course the student acquires ability to examine analytically all the ordinary materials likely to be presented to his attention during his professional engineering practice. He is, as far as possible, given charge of outside questions which come to the laboratory for solution. Blowpipe analysis and assaying extend over part of the second term of the third year, particular attention being given to the assay of gold and silver and to the recognition of such ores of the heavy metals as may be met with in the mining regions of this country.

Quantitative analysis and organic chemistry are not given to candidates for the degree of civil engineer. Courses in these subjects are given to candidates for the degree of bachelor of science, to postgraduates, and to special students. Very complete arrangements make these courses especially thorough.

MINERALOGY, GEOLOGY, AND METALLURGY.

These subjects are taught by means of lectures and recitations. An unusually fine collection of rocks, minerals, and designs for iron and steel works adds greatly to the value of the courses.

PHYSICS.

The course of physics begins in the last term of the first year with the mechanics of solids, liquids, and gases, and acoustics. Optics and heat are studied during the first term of the second year, and electricity and magnetism during the first term of the third year. These subjects are developed by daily lectures. The student uses a textbook, and is held strictly accountable for an exact knowledge of its contents, but much instruction is given additionally in the lectures, accompanied with full experimental illustrations. He is required to take notes during the course of the lectures and to copy others which have been put upon the blackboards. In the course of daily recitations problems are frequently assigned, and upon these, as well as on demonstrations of theory, the student is required to give both oral and written explanations. During the first term of the second year a course of laboratory work is conducted in which the student is introduced to the methods of quantitative measurement, and he thus acquires some familiarity with the use of physical instruments. For each exercise due preparation is made by appropriate reading, and a report is written which is examined by the instructor. During the first and second terms of the fourth year laboratory practice is continued, prominence being given to methods in electrical and magnetic measurement.

During the second term of the fourth year a course in thermodynamics is given, and this is followed by lectures on the elements of

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electrical engineering as an accompaniment to the laboratory work in electrical measurement.

SURVEYING.

The student begins the work in surveying during his first year at the institute. In the second term of this year he is taught the use of the chain, tape, and compass. He also makes a compass survey of a small piece of land, which is mapped and the area computed.

In the second year the construction and use of all modern surveying instruments, including transit, level, solar compass and attachment, clinometer, hand level, aneroid barometer, planimeter, etc., are taught in the class room, as are also the various methods in modern use of making land, topographical, hydrographical, mine, and city surveys. In topographical surveying, while all methods are taught and the conditions rendering one method more suitable than another, particular attention is paid to the transit and stadia, and the students become thoroughly familiar with this most generally suitable method. During the first term daily practice in the adjustment and use of the various instruments before enumerated is given. Surveys of limited extent are executed, a meridian is established with the solar compass, checked by stellar observations, and the magnetic declination of the needle determined.

At the close of the year the class is taken into the field for four weeks, and makes a complete topographical survey of an area selected with reference to the diversity of problems it presents. This survey is also made to include hydrographic work, as the portion of the stream within the area chosen for work is mapped from soundings and its flow determined.

GEODESY.

Besides the course in astronomy, in which the students are taught to determine latitude, longitude, time, etc., from observations on the heavenly bodies, a brief course in geodetic surveying is given in the third year. The work includes the methods of measuring base lines, field work of triangulation, adjustment of triangles and quadrilaterals, and a discussion of the figure of the earth.

HIGHWAY ENGINEERING.

During the third year there is given a course in highway engineering, in which is discussed the location, construction, and maintenance of country roads and city streets, the advantages and disadvantages of the various paving materials, and specifications for each, and a study is made of the various road laws in force and their adequacy. A special course of fifteen lectures on the construction and maintenance of country roads is offered to persons of mature years, and is designed for road overseers and others having to do with this class of work.

RAILROAD ENGINEERING.

The subject of railroad engineering is begun in the third year with a theoretical course in railroad curves, turnouts and minor structures, and the staking out and computation of railway earthwork. The course also includes a discussion of the method of making railway location surveys, and a contour map is furnished the student on which he projects a location line and makes an estimate of materials and cost. This theoretical course is followed at the close of the year by four weeks of field practice in railroad surveying, during which a preliminary survey is made and mapped, a location projected and run in, the work staked out, quantities computed, and cost estimated. A line from 3 to 8 miles in length is usually located, and through the courtesy of railroad officials interested in the institute the classes not infrequently have an actually contemplated line to examine, which secures an interest and faithfulness not always obtained on a mere "practice" line.

In the fourth year the subject generally known as economic theory of railroad location, embracing the items of train resistance and the effect of grades, curves, and length of line in operation is thoroughly studied, together with the correlative subjects of economic construction, maintenance of way, etc. Numerous problems are given to illustrate the subject, and a short thesis comparing two or more possible locations for a line, the data for which are given, is written. The students also discuss in the light of the new knowledge the location made the previous year. In addition to the above, there is given in the fourth year a comprehensive series of lectures on railway signals, embracing the construction and operation of block signals and interlocking signals for yards, crossings, etc.

SUMMER COURSES.

It is believed that the summer courses in surveying in the second and third years are particularly valuable on account of the continuous and practical character of the work. The student is employed all day for six days in the week, and the methods used both in the topographical and railroad surveys embody the latest modern practice. The work is usually located in the Adirondack foothills, and forms the most enjoyable and healthful as well as valuable portion of the surveying instruction. These courses are open to a limited number of special students who show themselves competent to perform the work.

TOPOGRAPHICAL DRAWING.

Topographical drawing is taught in the first, second, and third years of the course. In the first year the student learns to make the various topographic symbols, both in pen and ink and in color. In

the second year, in connection with the course in surveying, he maps small areas from notes furnished him, measures and computes the areas and draws contours, projects grades and computes volumes of earthwork involved in surface grading. He also makes the skeleton map of the summer survey. In the third year he completes this map and also makes in the field the map of the railroad survey. The use of the planimeter and the various diagrams for estimating areas and earthwork are taught.

RATIONAL MECHANICS.

At the conclusion of the course in integral calculus, during the first term of the third year, instruction in rational mechanics begins. In this course, which extends over a part of two terms with recitations and lectures every day, the fundamental theoretic principles of statics, cinematics, and dynamics which underlie and form the foundation of all branches of engineering are taught. The higher treatises and text-books, supplemented by notes, are used. The method of instruction, which applies as well to the technical subjects in the department of mechanics as to the rational, is as follows: The class is divided into sections, and each section, after a combined lecture and thorough interrogation by the professor in charge, goes to the assistant for a recitation on certain selected parts of the subject. The assistant requires each student each day to put one of these articles on the blackboard and explain it. During this explanation he is interrogated upon the principles involved.

STRUCTURES.

The theory of structures is taught during the last term of the third year. This includes the equilibrium and stability of frames, chords, arches, buttresses, chimneys, abutments, piers, retaining walls, dams, etc. Analytical and graphical methods of treatment are elaborated. A treatise on masonry construction is also used as a text-book, and the strength, properties, and cost of cement, mortar, concrete, brick, and stone masonry, together with all the more important kinds of foundations, are considered.

RESISTANCE OF MATERIALS.

The elasticity and resistance of the materials of engineering are considered during the first term of the fourth year. The fundamental equations of the theory of flexure are first determined and applied to a consideration of the strength of simply supported and continuous beams and of columns. Practical formulæ for the strength of beams are determined, and the right line long-column formula and those of Gordon and Euler are deduced. Attention is also paid to the graphical representation of the strength of columns. Theoretical formulæ

for torsion are developed and applied to a consideration of the strength of shafting. The design of riveted joints for boiler and tube work is taken up and the proper size and pitch of rivets determined.

In the practical part of the subject the coefficient of elasticity, elastic limit, ultimate resistance, and other properties of cast and wrought iron, malleableized iron, steel, bronze, copper, and other metals in tension, compression, and shear are studied, and the students are required to make experiments on the testing machine and determine their properties as above outlined. The value of wood, stone, brick, etc., for use as materials of engineering, is investigated, and each student also determines the strength of cement by the use of a cement-testing machine. Attention is paid to the fracture and appearance of metals, and also to the effect of repetition and reversal of stress.

BRIDGES AND ROOFS.

The course on bridges and roofs is given in the first and second terms of the fourth year. The first part is devoted to the theory of stresses. In this the student becomes familiar with the calculation of stresses in plate girders, in Howe, Pratt, Whipple, and lattice bridges, and in trusses with curved chords; also in cantalever, suspension, and draw bridges, and in various kinds of roof trusses. Analytical and graphical methods and the method of wheel concentrations and of panel loads are used. Details and connections are carefully considered and studied from the very large collection of blue prints of existing structures of all kinds in possession of the institute. A set of bridge specifications forms a part of the course upon which recitations are required, and handbooks of bridge and iron works are used for reference. During this course the class is taken out for an examination and comparison of various styles of bridges in the vicinity, and a bridge shop is also visited and the machines and methods of manufacture explained.

The second part of the course in the second term is taken up with the design of bridges and parts of bridges. The student makes all the calculations and complete shop drawings of the work in hand, each bridge being different from the others, and tracings and blue prints are finally made. It is thus seen that the course is thoroughly practical in its character.

HYDRAULICS AND HYDRAULIC MOTORS.

This subject is taught in the fourth year. It includes hydrology, hydrostatics, theoretical hydraulics, the flow of water through orifices, over weirs and dams, through tubes and pipes, and in conduits, canals, and rivers, the measurement and cost of water power, the dynamic pressure of flowing water, hydraulic motors, and the general principles of naval hydromechanics. Numerous examples illustrating the principles are given. In the direction of water-supply engineering there are considered general rainfall statistics, precipitation, evapo-

ration, the collection and storage of water, and its impurities, the practical construction of waterworks, including reservoir embankments, wasteweirs, partition walls, conduits, distributing systems, and the various methods of filtering. The delivery of water by pumps is here touched upon, though this matter is more thoroughly treated in the course on the steam engine. The theory and efficiency of the various forms of water wheels are investigated, and the students are instructed with regard to the different kinds of turbines, with their draft tubes, diffusers, and governors.

Students are required to measure the flow of adjacent streams by means of weirs, and thus practically to find the discharge. Practice in the measurement of the velocity of streams by means of current meters and floats is also given, and models of valves, motors, practical working turbines, etc., add value to the instruction.

The subject of aerodynamics is also taken up in this course, and the flow of air through orifices, and in pipes, blowing engines, the relations between the velocity and the pressure of the wind, anemometers, windmills, etc., are studied.

SEWERAGE SYSTEMS.

The design of sewerage systems is taken up in the fourth year. A comparison of the cost and efficiency of the different systems is made and the conditions under which each should be used explained. The various methods of sewage disposal are exemplified and their efficiency discussed. The effect of the surface slope and magnitude of area drained in connection with the maximum rainfall is considered, and main and branch sewers for the separate and combined systems are proportioned and their cost determined. The materials of construction, foundations required, methods of laying, and descriptions of details, such as branches, manholes, catch basins, etc., are also given.

STEAM ENGINEERING.

The course in steam engineering is given during the last term of the fourth year. It consists of a series of lectures by a well-known consulting mechanical engineer. The properties of steam are first elaborated and afterwards the details and construction of the various engines and boilers in ordinary use considered. The strength of their parts is calculated and their general operation explained. The course also includes pumping machinery. The lectures are illustrated by drawings, photographs, and handbooks, and books of reference are used for consultation. Each student makes a general design for a locomotive, pumping, marine, or other form of engine, though detailed drawings are not expected. He is also required to take indicator's diagrams from some engine and determine from them its power. Examinations of various forms of steam engines in the vicinity are also made under the direction of the instructor.

THESES.

A thesis on some technical subject must be written by each student during each summer vacation.

A graduating thesis, which must be either a review of, or a design for, a machine, structure, plant, system, or process belonging to a department of scientific or practical technics, is also required.

The annual register of the institute for 1893 contains the following clauses in relation to the conferring of degrees:

DEGREES.

The institute will confer the degree of civil engineer, or of bachelor of science upon all its future graduates who shall have completed the courses leading to such degrees, either of them.

The conditions of conferring the d are as follows:

1. The candidate must have a satisfactory examination in all the studies of the course in ci gineering or in that leading to the degree of bachelor of science.
2. His thesis must have been appr by the faculty.
3. He must have paid all dues to stitute.
4. He must be of good moral chara

BUILDINGS AND PERTY.

The institute has at present six bu ngs in use for purposes of instruction—the main building, the Winslow Laboratory, the Ranken House, the astronomical observatory, the gymnasium, and the alumni building.

The main building is 115 feet in length, 50 feet in breadth, and four stories in height. It contains lecture and recitation rooms, drawing rooms, and the laboratories of the department of physics. The main hall of the institution, where the reading of theses takes place, is also in this building.

The Winslow Laboratory is 77 feet long, 45 feet wide, and three stories high. It is devoted to the department of chemistry. The first story contains rooms for quantitative analysis and special investigations, and also the furnaces for the work in assaying. The second story contains the general laboratory for qualitative analysis and rooms for chemical balances and for the instructor in charge. The third story contains the general lecture hall, a recitation room, a room for the apparatus used in the lectures on general chemistry, and an office for the use of the instructors in the department. In this room there is a carefully selected special chemical library.

The William Proudfit Observatory is an astronomical observatory consisting of a central part 40 feet square, with north, south, and east wings. It is 70 feet long and 60 feet in depth. It is well equipped with instruments for use in engineering instruction, con-

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taining a transit instrument, chronometer, chronograph, clocks, and sextant.

The Ranken House is 40 feet square and two stories in height. It is used as a mechanical laboratory, and contains machines for the testing of the various metals and of cement, stone, wood, etc.

The gymnasium is 80 feet long, 44 feet wide, and two stories high. The first story contains bowling alleys, sponge and shower baths, a dressing room, and a reception room. The whole of the second story, 30 feet in height, is taken up by the gymnasium proper, which has a gallery with a racing track, and is fitted up with the best patterns of Dr. Sargent's gymnastic apparatus.

The alumni building is about 50 feet square and three stories in height. It is fireproof throughout, having concrete floors and brick partition walls. The first floor contains the library, a room for the trustees and the transaction of general executive business and one for the office of the director. The second and third floors contain the geological, mineralogical, and general natural history collections. There is also a lecture room for the professor of geology on the second floor.

THE LIBRARY.

The library, located on the first floor of the new fireproof alumni building, is strictly technical in its character. It consists of about 5,000 volumes and a large number of pamphlets and maps, and contains many valuable scientific works, including the publications of foreign and American societies, and bound volumes of various technical journals. The professional library of the late Alexander L. Holley was bequeathed by him to the institution and forms a part of its collection. The books and pamphlets are accessible to all members of the institute, and the reading room attached contains the current numbers of all the more valuable scientific publications of this and other countries.

The institution possesses valuable collections of drawings, models, instruments, and machines for purposes of illustration and instruction in its various departments. The total value of its property is estimated at $350,000.

ITS GRADUATES.

The importance of this institution in the educational history of the country is well known. This is due not only to the methods of instruction and the high standard of scholarship required, but also to the splendid work of its graduates as engineers and teachers of science. In a pamphlet published in 1892, entitled A Partial Record of the Work of Graduates of the Rensselaer Polytechnic Institute, are given the names of 33 presidents, 121 vice-presidents, managers, and superintendents, and 69 chief engineers of railroad companies, steel and iron works, bridge companies, waterworks, electric companies, mining companies, sewerage systems, canals, etc., who have graduated

at the school; also of 5 State geologists and 56 professors who have been conne with most of the great educational institutions of the country. amphlet also shows that the graduates of the school have been cc cted as designers and constructors with nearly all the larger bric mpanies and great bridges in the country, and that they have h sponsible positions helped to build and equip 109,000 miles of the r road systems of North America, besides many miles in other quarte f the globe. One hundred and ninety of the graduates of the school have become members of the American Society of Civil Engineers. It received at the Paris Exposition of 1889 the only grand prize given to engineering schools of the United States.

That it is w ly known as a school of science may be inferred from the residences o e come from all parts of the world.

Including the cla een 1,093 graduates, of whom 837 are alive and e hundred and forty-seven received the degree C. E.). The graduates are practicing their profe States and Territories of the United States and in 1 .

Besides the Gen n of the Institute there are associations Kansas City, Chicago, and New York.

The annu s the names of 18 professors and instructors, lents.

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The laws of the State of New York for the years 1826, 1832, 1833, 1835, 1837, 1850, 1851, 1861, 1863, 1864, 1866, 1868, and 1871 contain provisions relating to the school.

Prospectus entitled Preparation Branch Recently Established at Rensselaer School, and dated September 14, 1826.

Prospectus entitled Notices of Rensselaer Institute, and dated October 15, 1835.

The Rensselaer Polytechnic Institute. Its Reorganization in 1849–50; its Condition at the Present Time; its Plans and Hopes for the Future, by B. Franklin Greene, was published in 1856. 8vo pamphlet, 87 pp.

Papers relating to the Organization of the Association of Graduates, Troy, N. Y., June 22–23, 1869. 8vo pamphlet, 24 pp.

Proceedings of the Semicentennial Celebration of the Rensselaer Polytechnic Institute, Troy, N. Y., held June 14–18, 1874. 8vo pamphlet, 139 pp.

History of the Winslow Laboratory and the Cabinets of Mineralogy and Geology, Troy, N. Y., 1874. 8vo pamphlet, 13 pp.

Rensselaer Polytechnic Institute, Troy, N. Y. Meeting of Alumni in New York, February 18, 1881. 8vo pamphlet, 30 pp.

Biographical Record of the Officers and Graduates of the Rensselaer Polytechnic Institute, 1824–1886, by Henry B. Nason. 8vo. 614 pp.

A Partial Record of the Work of Graduates of the Rensselaer Polytechnic Institute, Troy, N. Y., 1892. 8vo pamphlet, 27 pp.

The Rensselaer Polytechnic Institute, Troy, N. Y., founded 1824. Handbook of Information. 8vo pamphlet, 23 pp.

Annual registers of the institute from the foundation of the school to 1893.

POPULAR COLLEGES AND SUMMER SCHOOLS.

Peculiar work of a technical or a popular character, done by such institutions as Cooper Union in New York, Pratt Institute in Brooklyn, Chautauqua University, and the Catholic Summer School of America, valuable as it is, does not properly belong within the limits of this history, although the above institutions are colleges incorporated under the laws of the State of New York. They are doing work which falls in with the university-extension movement, as leading to a wider opportunity for higher education to the people at large. The real history of this large movement is yet to make, and such beginnings as can be attributed to these institutions have been often described in pamphlets and articles easily accessible. Reference is specially made to the following list of publications:

"The history of summer schools in the United States," by W. W. Willoughby, Ph. D. Published as chapter 29 of the Report of the United States Commissioner of Education for 1891–92.

COOPER UNION.

Hough, F. B. Historical and Statistical Records of the University of the State of New York, 1784–1884. Albany, 1885. This sketch has peculiar interest as giving an account of the conferring of the degree of LL. D. upon Peter Cooper, on February 12, 1878, his eighty-ninth birthday.

Laws of New York, 1857, chap. 31. "Incorporation of the Peter Cooper Union for the Advancement of Science and Art."

Laws of New York, 1859, chap. 379, amending above. Pamphlet, "Charter, Trust Deed, and By-laws of the Cooper Union for the Advancement of Science and Art; with the letter of Peter Cooper accompanying the trust deed." New York, 1881.

This pamphlet contains also the by-laws and regulations of the institution.

Address of the graduates and pupils to Peter Cooper, esq., and his reply at the annual commencement, May 31, 1871. New York, 1871.

Annual Report of the Trustees. The thirty-ninth report is dated May, 1898.

"Regents' Report for 1889." P. 592 has interesting summary of the financial statements of the institution.

CHAUTAUQUA.

Chautauqua Assembly Herald.

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Noble, F. P. Chautauqua as a new factor in American life. New England Magazine n. s. 2: 90.

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Prof. Herbert B. Adams. Chautauqua. Report of United States Commissioner of Education for 1894–95. Chapter 19. Comprises 100 pages and includes an account of the "Catholic Chautauqua," the Catholic Summer School.

PRATT INSTITUTE.

Campbell, J. R. Pratt Institute. Century 46: 870.

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CHAPTER 8.

SECONDARY SCHOOLS COMPRISED IN THE UNIVERSITY.

The secondary schools of New York, outside of the purely private schools, are divided into three classes—academies, high schools, and academic departments of union schools. They are designed to cover the four years of work preparatory to admission to the first year of college. Although touching at several points the work under the direction of the department of public instruction, notably in the academic departments of union schools, yet they are kept under the supervision and control of the regents. Much of the most effective work of the regents has been in securing greater uniformity and higher standards of work in the academies. The number of these institutions is so great that detailed account is here impossible, although several of the academies date from the last century and have a history at once interesting and instructive. A detailed account of these academies will be found in Dr. Hough's Historical and Statistical Record of the University of the State of New York, already referred to, chapter 27. Chapters 11 to 26, inclusive, of that work are likewise devoted to the academies.

In June, 1897, there were a total of 584 of these secondary schools in the State. They were attended by over 53,000 scholars and had a total of 3,291 teachers, of whom 2,256 were women. The 465 high schools and academic departments, which are public institutions, had a net property of $7,667,883.30, and expended $1,892,960.16 for the year, while the 119 academies, which are incorporated, show a net property of $15,493,518.70, with expenses for the year of $1,391,286.02.

The following extracts from the report of Secretary Melvil Dewey to the regents for 1897 will be found interesting:

ACADEMIES AND HIGH SCHOOLS.

In 1896, the last year for which the statistics are available, 600,000 pupils pursuing secondary studies were reported to the United States Bureau of Education, nearly seven-eighths of the whole number being in public and private high schools, the remainder in normal schools, academic departments of colleges, etc. There are now in the high schools and academies of New York State 53,464 students, or about one-eleventh of the whole number in the United States. Of these 82 per cent are in our high schools, while the whole United States shows 78 per cent of the entire number taking the public-school course. The number of public high schools in the United States in 1896 was 4,974—421, or more than one-twelfth, being in New York. The growth in one year for the whole country was 262 schools, of which one-fifth was in New York, whose high schools increased from 371 to 421.

During the year ending June 30, 1897, the high schools in our State reached the number 465, and there were 119 academies, making a total of 584.

Including the additions up to the time this report goes to press, there are in this State 611 high schools and academies, or about 1 to every 10,000 population. For comparison with another of the States of the Union, we note that Ohio, with 4,000,000 population, reports 558 public high schools and 56 private, a total of 614, or about 1 to every 8,000 population.

NUMBER OF STUDENTS IN ACADEMIES AND HIGH SCHOOLS, 1892 AND 1897.

The following table shows the number of students in 1892 compared with that in 1897:

Comparative summary of students.

Year.	High schools.			Academies.			Total in secondary schools.
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	
1897	19,594	24,322	43,916	4,653	4,895	9,548	53,464
1892	12,055	16,304	28,359	5,035	5,615	10,650	39,009
Increase (+) or decrease (—), 1897	+7,539	+8,018	+15,557	—382	—720	—1,102	+14,455
Per cent	+ 63	+ 49	+ 55	— 8	— 13	— 10	+ 37

The list of the academies which follows is taken from the regents' report for the year ending June 30, 1896, and shows 128 institutions:

Academies of the University of the State of New York.

[L.—Legislature; all others incorporated or admitted by regents.]

No.	Name.	City or village and county.	Incorporated or admitted.	
			By—	Date.
1	Academy of Mount St. Vincent	New York	L.	Jan. 26, 1849
2	Academy of Notre Dame	Albany	L.	Feb. 16, 1885
3	Academy of Sacred Heart	Syracuse, Onondaga	.....	Jan. 9, 1889
4	Adams Collegiate Institute	Adams, Jefferson	.....	Apr. 12, 1855
5	Adelphi Academy	Brooklyn, Kings	.....	Aug. 3, 1869
6	Albany Academy	Albany	.....	Mar. 4, 1813
7	Albany Female Academy	Albany	L.	Feb. 16, 1821
8	Alfred University, academic department.	Alfred, Allegany	.....	Jan. 31, 1843
9	A. M. Chesbrough Seminary	North Chili, Monroe	.....	Jan. 14, 1869
10	Augustinian Institute	Carthage, Jefferson	.....	Nov. 21, 1895
11	Berkeley Institute for Young Ladies.	Brooklyn, Kings	L.	Apr. 12, 1886
12	Bridgehampton Literary and Commercial Institute.	Bridgehampton, Suffolk	.....	Nov. 29, 1875
13	Buffalo Seminary	Buffalo, Erie	.....	Oct. 14, 1851
14	Canandaigua Academy	Canandaigua, Ontario	.....	May 4, 1795
15	Canisteo Academy	Canisteo, Steuben	.....	Mar. 16, 1868
16	Cary Collegiate Seminary	Oakfield, Genesee	.....	May 16, 1845
17	Cascadilla School	Ithaca, Tompkins	.....	Dec. 13, 1893
18	Cathedral Academy of City of Albany.	Albany	.....	Dec. 14, 1892
19	Cayuga Lake Academy	Aurora, Cayuga	.....	Mar. 23, 1801
20	Cazenovia Seminary	Cazenovia, Madison	L.	Apr. 6, 1825
21	Chamberlain Institute	Randolph, Cattaraugus	.....	Jan. 24, 1851
22	Champlain Institute	Port Henry, Essex	.....	Feb. 8, 1894
23	Charbonneau Institute	Rouse Point, Clinton	.....	June 26, 1895
24	Christian Brothers' Academy	Albany	.....	Aug. 3, 1869
25	Cincinnatus Academy	Cincinnatus, Cortland	.....	Apr. 21, 1857
26	Clifton Springs Female Seminary.	Clifton Springs, Ontario	L.	May 11, 1868
27	Clinton Liberal Institute	Fort Plain, Montgomery	L.	Apr. 29, 1834
28	Colgate Academy	Hamilton, Madison	.....	June 17, 1853
29	Cook Academy	Montour Falls, Schuyler	.....	Aug. 7, 1872
30	De Lancey School	Geneva, Ontario	.....	Dec. 7, 1887
31	Delaware Academy	Delhi, Delaware	.....	Feb. 2, 1820
32	Delaware Literary Institute	Franklin, Delaware	L.	Apr. 23, 1835
33	De Veaux School	Niagara Falls, Niagara	L.	Apr. 15, 1853
34	D'Youville Academy	Plattsburg, Clinton	.....	Dec. 14, 1892
35	East Springfield Academy	East Springfield, Otsego	.....	July 13, 1880
36	Evans Academy	Peterboro, Madison	.....	Jan. 28, 1853
37	Fairfield Seminary	Fairfield, Herkimer	.....	Mar. 15, 1803

Academies of the University of the State of New York—Continued.

No.	Name.	City or village and county.	Incorporated or admitted.	
			By—	Date.
38	Female Academy of Sacred Heart	Kenwood, Albany	L.	Mar. 19, 1861
39	Female Academy of Sacred Heart	New York	L.	July 9, 1851
40	Female Academy of Sacred Heart	Rochester, Monroe	L.	Apr. 15, 1858
41	Female Institute of the Visitation	Brooklyn, Kings	L.	Apr. 17, 1863
42	Flushing Institute	Flushing, Queens	L.	Apr. 16, 1827
43	Fort Edward Collegiate Institute	Fort Edward, Washington	.....	July 8, 1854
44	Genesee Wesleyan Seminary	Lima, Livingston	L.	Apr. 30, 1833
45	Glens Falls Academy	Glens Falls, Warren	.....	Jan. 25, 1842
46	Greenville Academy	Greenville, Greene	.....	Feb. 26, 1816
47	Hartwick Seminary, academic department.	Hartwick Seminary, Otsego	.....	Aug. 13, 1816
48	Hebrew Technical Institute	New York	L.	Jan. 10, 1884
49	Hogansburg Academy	Hogansburg, Franklin	.....	Jan. 9, 1889
50	Holy Angels' Academy	Buffalo, Erie	L.	Feb. 13, 1865
51	Houghton Seminary	Clinton, Oneida	.....	Jan. 12, 1881
52	Hudson River Institute	Claverack, Columbia	L.	Apr. 25, 1831
53	Institute of the Sisters of St. Joseph	Buffalo, Erie	.....	Dec. 14, 1892
54	Ives Seminary	Antwerp, Jefferson	.....	Feb. 1, 1856
55	Keuka Institute	Keuka College, Yates	.....	Dec. 10, 1890
56	Lansingburg Academy	Lansingburg, Rensselaer	.....	Feb. 8, 1796
57	La Salle Academy	New York	.....	June 24, 1896
58	La Salle Institute	Troy, Rennselaer	.....	July 7, 1891
59	Lowville Academy	Lowville, Lewis	.....	Mar. 21, 1808
60	McAuley Academy	Keeseville, Clinton	.....	Dec. 9, 1891
61	Macedon Academy	Macedon Center, Wayne	L.	Apr. 11, 1842
62	Marion Collegiate Institute	Marion, Wayne	.....	July 6, 1855
63	Mount Beacon Academy Association.	Fishkill on Hudson, Dutchess	L.	May 21, 1885
64	Mount Pleasant Academy	Sing Sing, Westchester	L.	Mar. 24, 1820
65	Mount St. Marys Academy	Newburg, Orange	.....	July 5, 1887
66	Munroe Collegiate Institute	Elbridge, Onondaga	.....	Apr. 23, 1839
67	Nazareth Academy	Rochester, Monroe	.....	Dec. 9, 1891
68	New York Military Academy	Cornwall on Hudson, Orange	.....	May 1, 1890
69	Oakwood Seminary	Union Springs, Cayuga	.....	Jan. 13, 1860
70	Oxford Academy	Oxford, Chenango	.....	July 27, 1794
71	Packer Collegiate Institute	Brooklyn, Kings	L.	May 8, 1845
72	Peekskill Academy	Peekskill, Westchester	L.	Apr. 16, 1838
73	Pike Seminary	Pike, Wyoming	.....	Feb. 1, 1856
74	Polytechnic Institute, Brooklyn, academic department.	Brooklyn, Kings	.....	Apr. 7, 1854
75	Pratt Institute High School	do	.....	Feb. 8, 1894
76	Rensselaerville Academy	Rensselaerville, Albany	.....	Jan. 30, 1845
77	Round Lake Summer Institute	Round Lake, Saratoga	.....	Jan. 10, 1889
78	St. Agnes Female Seminary	Brooklyn, Kings	.....	Feb. 28, 1895
79	St. Ann's Academic School	Hornellsville, Steuben	.....	June 5, 1894
80	St. Austin's School	New Brighton, Richmond	L.	Mar. 13, 1886
81	St. Bernard's Academy	Cohoes, Albany	.....	Dec. 10, 1890
82	St. Elizabeth's Academy	Allegany, Cattaraugus	.....	June 26, 1895
83	St. Faith's School	Saratoga Springs, Saratoga	.....	June 21, 1893
84	St. Francis Xavier's Academic School.	Brooklyn, Kings	.....	June 26, 1895
85	St. Gabriel's School	New York	.....	Feb. 8, 1894
86	St. Joachim's Academic Institute	Watertown, Jefferson	.....	do
87	St. John's Academic School	Greenbush, Rensselaer	.....	Nov. 21, 1895
88	St. John's Academy	Albany	.....	June 24, 1896
89	St. John's Catholic Academy	Syracuse, Onondaga	.....	Dec. 7, 1887
90	St. John's Military School	Manlius, Onondaga	L.	June 6, 1881
91	St. Joseph's Academic School	Binghamton, Broome	.....	June 5, 1894
92	St. Joseph's Academy	Albany	.....	Feb. 11, 1892
93	St. Joseph's Academy	Brasher Falls, St. Lawrence	.....	Dec. 9, 1891
94	St. Joseph's Academy	Flushing, Queens	L.	Aug. 27, 1860
95	St. Joseph's Academy	Troy, Rensselaer	.....	June 24, 1896
96	St. Joseph's Academy and Industrial Female School.	Lockport, Niagara	L.	Feb. 19, 1866
97	St. Margaret's School	Buffalo, Erie	L.	Jan. 7, 1885
98	St. Mary's Academic School	Dunkirk, Chautauqua	.....	Feb. 8, 1894
99	St. Mary's Academic School	Hoosick Falls, Rensselaer	.....	Dec. 12, 1894
100	St. Mary's Academy	Ogdensburg, St. Lawrence	.....	Dec. 10, 1890
101	St. Mary's Academy and Industrial Female School.	Buffalo, Erie	L.	Apr. 29, ——
102	St. Mary's Catholic Institute	Amsterdam, Montgomery	.....	July 10, 1883
103	St. Patrick's Academy	Catskill, Greene	.....	Feb. 11, 1892
104	St. Peter's Academy	Rome, Oneida	L.	Dec. 13, 1883
105	St. Peter's Academy	Troy, Rensselaer	.....	Jan. 9, 1889
106	St. Philomena's Academic School	Brushton, Franklin	.....	Dec. 12, 1894
107	St. Stanislaus Academic School	Keeseville, Clinton	.....	Feb. 28, 1895
108	St. Teresa's Ursuline Academy	New York	.....	June 24, 1896
109	St. Thomas Aquinas's Academy	Brooklyn, Kings	.....	Mar. 19, 1896
110	Seymour Smith Academy	Pine Plains, Dutchess	.....	Apr. 21, 1874
111	Sherman Collegiate Institute	Moriah, Essex	.....	Feb. 16, 1841
112	Sodus Academy	Sodus, Wayne	.....	Jan. 11, 1855
113	Starkey Seminary	Eddytown, Yates	.....	Feb. 25, 1848
114	Staten Island Academy	New Brighton, Richmond	.....	Jan. 7, 1885

Academies of the University of the State of New York—Continued.

No.	Name.	City or village and county.	Incorporated or admitted.	
			By—	Date.
115	Syrian Protestant College, Academic Department.	Beirut, Syria	L.	May 4, 1864
116	Temple Grove Seminary	Saratoga Springs, Saratoga	.....	June 4, 1869
117	Ten Broeck Free Academy	Franklinville, Cattaraugus	L.	Apr. 19, 1862
118	Trinity School	New York	L.	Mar. 14, 1806
119	Troy Academy	Troy, Rensselaer	L.	May 5, 1834
120	Troy Female Seminary	do	L.	May 6, 1837
121	Union Academy of Belleville	Belleville, Jefferson	L.	Apr. 13, 1826
122	Ursuline Convent	Bedford Park, New York	L.	Apr. 13, 1868
123	Utica Catholic Academy	Utica, Oneida	.....	Dec. 9, 1891
124	Utica Female Academy	do	L.	Apr. 28, 1837
125	Wagner Memorial Lutheran College.	Rochester, Monroe	L.	July 30, 1886
126	Walworth Academy	Walworth, Wayne	L.	May 12, 1841
127	Westerleigh Collegiate Institute	West New Brighton, Richmond	.....	June 24, 1896
128	Wilson Academy	Angelica, Allegany	.....	June 12, 1881

There were that year 421 high schools and academic departments, as against 465 in 1897, scattered, of course, throughout all the counties of the State. One county, however, Hamilton, lying in the Adirondack region, has no institution of secondary education.

SUMMARY OF THE INSTITUTIONS OF THE UNIVERSITY.

On January 1, 1898, the number and location of institutions comprised in the University of the State of New York were as follows:

Institutions in the university.	Number January 1, 1898.	Students 1896-97.	
		Men.	Women.
Universities and colleges of liberal arts:			
For men	23	3,331	9
For women	5	2	2,217
For men and women	6	1,717	852
Total	34	5,050	3,078
Professional and technical schools:			
Law	7	1,999	42
Medicine	15	3,790	235
Dentistry	3	499	12
Veterinary medicine	3	119	.....
Pharmacy	5	623	21
Theology	14	757	15
Education of teachers	4	198	913
Education of librarians	1	5	28
Music	4	155	515
Other	15	5,732	4,249
Total	71	13,877	6,030
Academies:			
Academies (incorporated)	92	3,825	4,330
Senior academic schools	2	208	40
Middle academic schools	7	122	157
Junior academic schools	22	498	368
Total	123	4,653	4,895
High schools:			
High schools	252	15,515	19,316
Senior schools	25	885	1,149
Middle schools	50	974	1,272
Junior schools	159	2,128	2,499
Special schools *a*	2	92	86
Total	488	19,594	24,322
Grand total students	.....	*b* 43,146	38,325
			81,471

Institutions for home education:	Number.
Institutes	3
Libraries (incorporated or admitted)	135
Registered libraries *c*	48
Museums	2
Extension teaching centers	44
Summer schools	2
Study clubs	186
Total	420
Grand total all institutions	1,136

a New York institution for the blind and New York State school for the blind.
b Not including 28 duplicates.
c Including branches.

Location of institutions in university by counties, June 30, 1897.

County.	High schools.	Academies.	Colleges.	Professional and technical schools.	Libraries.		Total.
					University of the State of New York.	Not in University of the State of New York.	
Albany	3	10		6	1	16	36
Allegany	11	2	1	1	3	1	19
Broome	7	1				4	12
Cattaraugus	14	3	1	1		3	22
Cayuga	6	2	1	1	3	7	20
Chautauqua	12	1			3	6	22
Chemung	3		1		1	8	13
Chenango	8	1			1	2	12
Clinton	5	4		1	1	2	13
Columbia	3	1			5	2	11
Cortland	5	1			1	2	9
Delaware	7	2			1	3	13
Dutchess	7	2	2	1	2	13	27
Erie	12	5	1	8	3	21	50
Essex	11	2			6	1	20
Franklin	5	2			1	2	10
Fulton	3					1	4
Genesee	8	1				4	13
Greene	4	2			2		8
Hamilton						1	1
Herkimer	7	1			5	2	15
Jefferson	10	5			1	2	18
Kings	1	9	3	4	3	30	50
Lewis	2	1					3
Livingston	7	1			1	3	12
Madison	13	3	1	1		7	25
Monroe	10	4	1	2	2	9	28
Montgomery	7	2			2	2	13
New York	1	8	8	34	1	131	183
Niagara	5	2	1	1	3	3	15
Oneida	17	4	1		6	11	39
Onondaga	15	4	1	3	2	7	32
Ontario	9	3	1		2	4	19
Orange	12	2			3	14	31
Orleans	6				1	4	11
Oswego	10				1	6	17
Otsego	12	2		1	3	2	20
Putnam	2		1			2	5
Queens	13	2		1	7	20	43
Rensselaer	5	8		1	4	13	31
Richmond	3	3				8	14
Rockland	1				3	6	10
St. Lawrence	11	2	1	1	4	2	21
Saratoga	8	3			3	6	20
Schenectady	1		1		1	4	7
Schoharie	4						4
Schuyler	1	1			2	1	5
Seneca	3					3	6
Steuben	17	2			3	4	26
Suffolk	13				1	11	25
Sullivan	2				1		3
Tioga	6						6
Tompkins	5	1	1	1	4	1	13
Ulster	5				3	7	15
Warren	3	1			3	3	10
Washington	11	2			1	1	15

Location of institutions in university by counties, June 30, 1897—Continued.

County.	High schools.	Academies.	Colleges.	Professional and technical schools.	Libraries.		Total.
					University of the State of New York.	Not in University of the State of New York.	
Wayne	9	5				1	15
Westchester	9	2			7	30	48
Wyoming	8	1				3	12
Yates	3	2			1		6
Foreign countries:							
Brazil			2				2
China			1				1
Syria		1	1	2			4
Turkey			1				1

The map given on another page indicates the location of these institutions graphically. It is taken from the report of the secretary of the university for 1897.

APPENDIX.

ORIGIN AND DEVELOPMENT OF THE NEW YORK COMMON SCHOOL SYSTEM.[1]

Mr. President and ladies and gentlemen of the New York State Teachers' Association, if we are loyal sons and daughters of the Empire State, we know what are commonly considered the leading facts in her history. We can recount the chief and prominent incidents in her first settlement, and her wonderful development from the time when the *Half Moon* first stirred the waters of her majestic North River till she came to stand out as the central and conspicuous figure in the sisterhood of States. We have wondered at the daring and sighed at the fate of the dauntless English captain with a Queen Elizabeth ruff about his neck, who sailed his little Dutch vessel through the Narrows at our great harbor, only to be disappointed in his confident belief that he had at last found the great highway of the nations to the Indies, and to find himself in an imperial fresh-water river, flowing through what he described as "a land peopled by vigorous men and beautiful women—as beautiful a land as the foot of man can tread upon."

We have regretted that a noble company of English Puritans, bound for New Netherland in the *Mayflower*, were carried out of their course and landed upon the inhospitable shores of Cape Cod. Oh, how much New England owes to ill winds or bad seamanship! We have noted and commended the foresight and thrift which led the first Dutch settlers to buy 22,000 acres of land upon Manhattan Island from the Indians for the not extravagant sum of twenty-four dollars, and to lay the foundations of a State upon land in which they owned the fee. We have marked the different characteristics of the Dutch and the English as first one and then the other held the supremacy in the affairs of the colony. We have stood amazed in the presence of the fact that before and for many years after the coming of the whites there were upon this territory five savage nations with a system of laws and a retinue of officials, each with a completely organized government shaped and directed by the will of the majority, and all confederated together in a barbarian republic upon the unique plan afterwards adopted by our States and our National Republic.

We have followed in awe the unprecedented advance in population, the growth of the most imperial cities, the development of material resources apparently inexhaustible. We have witnessed the building of the greatest canal and railway systems, and have watched to a successful result the most gigantic commercial enterprises that human energy ever had the courage to undertake. We have seen literature and the arts and sciences nurtured and fostered by a people engrossed in the world's most bewildering activities. We have applauded the sagacity of our statesmen, and we have gloried in the immortal deeds of our heroes. We

[1] An address delivered before the New York State Teachers' Association, at Saratoga Springs, N. Y., Tuesday evening, July 8, 1890, by Andrew S. Draper, superintendent of public instruction, State of New York.

have listened to the discussions of the earliest Colonial Congresses to form a basis of union at Albany, and we have heard the first constitution promulgated from the head of a barrel in front of the old senate house at Kingston. We know how intrepid Ethan Allen, in the gray dawn of a May morning, demanded and received from the British commander in undress uniform the surrender of Ticonderoga "in the name of the Great Jehovah and the Continental Congress," when as yet the Congress had no existence: and how Mad Anthony Wayne, in reply to Washington's inquiry as to whether he would lead an attack on Stony Point, answered with the ardor of an enthusiast and the instinct of the soldier that he was—"I would lead an attack on hell if the commander in chief would order it, sir."

Our hearts have throbbed heavily as we have read the story of the heroic and successful life struggle of Herkimer's thin battalions in the valley of the Mohawk and of Sullivan's sanguinary campaign against hostile savages in the Genesee country. The blood has tingled as we have heard the victorious cannon and witnessed the humiliating surrender of the haughty Burgoyne at Saratoga, and we have held our breath as Macdonough assembled his crew about him, knelt in prayer on the quarter-deck of his flagship, and asked the aid of the Almighty on the ensuing action before his navy thrashed a superior force on Lake Champlain, while the army paid a similar compliment to Wellington's veterans, fresh from the field of Waterloo and almost disdaining to fight plain people, at Plattsburg.

We know how New York stood for independence, for the Federal Constitution, and the "more perfect union," in the first instance, and how she contributed one-eighth of her population, one-fifth of the entire force which went out to save that Union when assailed. We honor the names of Van Rensselaer and Stuyvesant and Schuyler and Cadwallader Colden and Richard Montgomery and the Livingstons and the Jays and Hamilton and Gouverneur Morris and the Clintons and Daniel D. Tompkins and Washington Irving and Fenimore Cooper and James Kent and Chancellor Walworth and Samuel Nelson and Silas Wright and Marcy and Van Buren and John A. Dix and a host of others, for we associate them with the circumstances which mark the growth and make the history of the great Commonwealth. In short, we have a general knowledge of the leading facts which stand out more prominently than the ordinary facts in the course of the physical and political development of the State.

INTELLECTUAL ADVANCEMENT.

But I venture that we are exceptional even among the loyal sons and daughters of the Empire State if we have investigated the causes which have promoted or if we know the events which have marked the social and intellectual advancement of the people of New York. If this is so, it is not strange. In the economy of statecraft, as in the experience of the schools, it is the physical object which arrests the attention, and it is the object lesson which excites interest, arouses enthusiasm, and leaves the deepest impressions upon the mind. Railways and steamships, merchandise and machinery, books and newspapers, great cities, public works and munificent charities, all the institutions which support a free State and the temple of liberty are but the public and visible manifestation of widespread mental and moral development. May we not to-night undertake to look through these visible objects and endeavor to discern the reason of them? May we not try to ascertain the leading influence behind these familiar and invaluable things and profitably to inquire into the causes which set this influence in operation and the results which it in turn has produced?

Circumstances have scarcely favored this unprecedented development in statehood. The foundations of New York were laid by a rude people in an unbroken wilderness overrun by barbarians and savages. The struggle for bread was a hard one. Yet these people offered asylum and succor to the oppressed and heart-

sore of all nations. The response was overwhelming. But all kinds, the best and the worst, came together. With the honest man, seeking the rights of conscience and the opportunity of improvement, which were denied him in the Old World, came the adventurer and the scapegrace. We have always held the greatest port of entry in the country, and the overwhelming and oft-polluted tide of immigration has always surged into or across our territory. The accumulation of many people in great communities always presents many and difficult social and industrial problems. Yet who shall say that the 6,000,000 of people of the Empire State are, all classes together, less generally informed, less keenly and alertly intelligent, than any other 6,000,000 of people on the globe? Again, who shall say that these 6,000,000 of people are not better housed, better fed, better clothed, more generally educated, more active in affairs, better equipped for self-government, than any other entire people numbering 6,000,000, unless it be other citizens of our own country, surrounded by the same circumstances and conditions?

This is the result of intellectual force and of mental strength widely spread and generally diffused. The fact that it reaches all classes is its chief glory. It extends not only to the manager of a railway, but to the man who runs the train or walks the track. Commonly both have enjoyed equal opportunities, and stand in different grades of the service only because of qualities which inhere in different individuals and which no policy of the State can regulate. As often as otherwise the man at the top suffered the greatest hardships, labored against the greatest disadvantages, and had the poorest chance. But both are alert within their sphere. Each is industrious and aggressive. Each reads the papers, discusses the tariff, and goes to the legislature. Each owns a home, supports a church, and mingles in affairs. Each constitutes the right kind of material out of which to erect a free State. If there is to be discrimination at all, it must be in favor of the masses fairly developed rather than of the few exceptionally intellectual or unusually prominent.

COMMON SCHOOLS PROMOTE GENERAL INTELLIGENCE.

What is the prominent and conspicuous influence which has led to this general enlightenment of the people? It is not leadership, except as leadership planned wisely in the beginning. It is not due to favoring circumstances; it is in spite of unfavorable ones. It is not due to the development of physical and material resources. That would be misplacing cause and effect. It is not the work of the university, unless it be indirectly and remotely. The common history of New York unmistakably shows that this widespread intelligence among her people was not manifest until the State placed common schools within easy distance of every home, and that from the time when this policy was well established her career has been practically unparalleled in the history of States.

QUALITIES OF FIRST DUTCH IMMIGRANTS.

Let us then spend an hour in investigating the rise and tracing the progress of the State public school system.

When America was first settled Europe was just emerging from the gloom of the "Middle Ages." The prerogatives of kings were being called in question, and the walled castle and the mailed knight were surely doomed. Commercial enterprise was beginning to show itself, industry was becoming honorable, learning was claiming some attention. Society, which had been prostrate for centuries before the feudal lord, was getting upon its feet again. Nowhere else was this so marked as in the Low Countries. Holland was the chief commercial and industrial nation of the world at the opening of the seventeenth century. It was doing more for education and had a fuller conception of the value of civil liberty than

any other. Mr. Motley, in his history of the Dutch Republic, says, "the children of the wealthier classes enjoyed great facilities for education in all the great capitals," and that "intellectual cultivation was not confined to the higher orders, but, on the contrary, it was diffused to a remarkable degree among the hard-working citizens and handicraftsmen." This people had sprung from sturdy Teutonic and Celtic tribes, and inherited a thrifty disposition and a manly and independent bearing. They had but just followed the lead of the finest orator, the most sagacious statesman, and the greatest soldier of the sixteenth century, in a revolt against arbitrary power, and had fought most heroically and suffered incomparably in the world's first and most memorable contest for liberty. Without democratic theories they had been spending their treasure and blood in resisting tyranny, until by force of circumstances their governmental organization became a republic. To such a people the company of Puritans, with Pastor John Robinson at its head, fled from England for shelter before drifting upon Plymouth Rock. From this people came the first settlers in a village which, for obvious reasons, they called New Amsterdam, in a territory they called New Netherland.

It would be strange, indeed, if they had not proved to be an industrious and thrifty people, as it would be equally strange if they had not brought with them a love for liberty and an instinct for self-government. Sturdy in body and mind, quaint in figure, tolerant in spirit, given to trade and to the accumulation of property, they cut the forest, tilled the ground, built huts, opened shops, trafficked with the Indians, while they organized society, established public worship, opened schools, and erected all the institutions of a civil state. In the most forbidding circumstances and contending with the strongest odds, they impressed their ways and their beliefs upon the future history of the country.

THE DUTCH ESTABLISH FREE SCHOOLS.

Our colonial records clearly show that in the midst of the most overwhelming difficulties they were not indifferent to the importance of schools, for even in their most important documents the affairs of the schools receive frequent mention. Their primitive and crude ideas, their difficulties in raising money and regulating teachers, the way in which they made great contentions out of insignificant matters, would be ludicrous if not so common in the closing years of the nineteenth century.

In 1621 the States-general of Holland enjoined the colony "to find speedy means to maintain a clergyman and a schoolmaster," and it was required that "each householder and inhabitant should bear such tax and public charge as should be considered proper for their maintenance." Four years later the expenses of the schoolmaster are shown to have been 360 florins, just one-fourth those of the minister. You observe that some pernicious ideas relate back to very early precedent.

In 1633 Adam Roelandson, a professional schoolmaster, was brought over to take charge of the school. He remained in charge for nine years, and is believed to have been the first professional schoolmaster in the country. Unfortunately the proof is abundant that he was of a quarrelsome nature and no credit to the profession.

Before 1650 New Amsterdam had a population of 800. Jan Cornelisen, Jan Stevenson, and Aryaen Janson are mentioned as teachers who kept schools "in hired houses." The excise moneys seem to have been set apart to pay teachers, and they were in part at least paid out of the public treasury. One of the reports of the board of accounts of New Netherland estimates that the expense for the next year of the "schoolmaster, precentor, and sexton" will be 30 florins, or about $12.30 per month. The estimate appears to have been conceived in too imprudent a spirit, and was reduced to 18 guilders or $7.56 per month. On one occasion the governor of the colony parleyed with the Indian chiefs and urged them to send

their sons down to New Amsterdam to school. After taking a week to consider, they diplomatically answered that they were powerless to accept the invitation, for the boys were altogether under the control of their mothers. I am sure that William Vestens, a teacher of ancient days, will not only challenge your admiration, but gain your sympathy, for he is shown to have led a bold but apparently an ineffectual movement for "an increase of salary."

The churches frequently maintained or supervised schools, and not uncommonly the functions of the minister and teacher were economically combined in the same person. Indeed, it more than once happened that the poor teacher had also to act as sexton, precentor, choirmaster or psalmsetter, and a "comforter of the sick," as the person who supplied the minister's place was commonly called. "Clergymen, comforters of the sick, and schoolmasters" were designated as "necessary officers" in the articles adopted by the economical States-general in 1638, concerning the colonization of New Netherland. One of the dignified early reports upon the condition of the colony speaks of the plate having been passed around a long time to raise money to build a schoolhouse, "which has as yet been built only with words," and asserts that the school "is kept very irregularly by this one or that according to his fancy, as long as he thinks proper." If this was not for the purpose, it certainly should have had the effect of loosening the purse-strings of the home government.

The extension of the population into the interior is shown by the official direction to provide ministers and teachers to be sent to "Rensselaer's Colonie" and other "distant places." In one instance the people are plainly told by the director for the colony that "if they are such patriots as they appear to be, they will be leaders in generous contributions for laudable objects, and will not complain when the directors request a collection toward the erection of a church and a school." That learning was making progress is shown by the fact that in 1655 Aegidius Luyck is spoken of "as late principal of the Latin school in New Amsterdam." In several instances the governor and council of the colony received complaints that the inhabitants of certain villages refused to pay for the support of schools, and, after notifying the delinquents to appear and answer, ordered them "to promptly pay their share for the support aforesaid, on pain of proceeding against them with immediate execution." How much pain would ensue in that painful event, I am certainly unable to say.

COMMON SCHOOLS IMPARTED FROM HOLLAND.

Reminiscences like these might be multiplied almost indefinitely. Enough have been recited to show that while learning was in its incipient stages, as was everything else, yet the common-school idea was among this people in the correct form, and that it was developing. Indeed, it occurs to me that enough has been shown to establish the proposition that we are indebted to the Republic in the Netherlands, rather than the Kingdom of Great Britain, for the first and essential principles of the free-school system, and that the first importation came by way of the narrows at Sandy Hook, rather than over Cape Cod.

LATIN SCHOOLS AT NEW AMSTERDAM.

In 1658 the people Petitioned Peter Stuyvesant, the director, for a person to teach a Latin school, assuring him that it would be well attended, and would lead to the formation of an academy, "whereby this place to great splendor will have attained." The petition was granted, and a classical school was opened. Dr. Alexander Carolus, a professional teacher, was principal. He received $187.50 annually from the public treasury, was provided with a house and garden, received six guilders from each student, and was allowed to practice medicine in addition.

ENGLISH GOVERNMENT OPPOSED TO COMMON SCHOOLS.

It is said by eminent authority that when the Dutch were obliged to surrender to the English in 1664, the educational spirit was so common throughout the colony that almost every settlement had a regular school taught by more or less permanent teachers, and that there was a decided setback given to this movement upon the advent of the English in consequence of the apprehension on the part of the nobility that common schools would nourish and strengthen a spirit of independence which had, even then, made some considerable headway. It is true that the official instructions sent by the Government to the successive governors of the province uniformly provided that no person should be permitted to come from England to teach a school without the license of the archbishop of Canterbury, and that no person here should do so without the license of the governor, but it seems clear that this was not so much for the purpose of excluding incompetent instructors as it was to control appointments and determine the course of the schools.

Substantially the only legislative act relating to free schools passed within the colony during the English rule is that entitled "An act for encouragement of a grammar free school in the city of New York," bearing date of November 22, 1702. It provided that there should be "Elected, Chosen, Authorized and appointed, one able, skilfull and Orthodox person to be Schoolmaster, for the education and instruction of youth and Male Children of such parents as are of French and Dutch extraction as well as of the English," and that there should each year for seven years be levied and collected the sum of £50 for the support of such schoolmaster. This would seem to impair the statement that the English did not aid the organization of schools. But an examination of the records confirms the fact beyond question.

The bill was first passed by the general assembly in which the Dutch were strong if not predominant. The governor and council refused to approve it and returned it to the assembly. The assembly adhered to its position. A committee of conference was appointed, and, after days of controversy, a compromise was finally agreed upon by which the bill was amended so as to require that the teacher should be licensed and approved by the bishop of London or the governor or commander in chief of the province. The bill was enacted by the Dutch. It was approved by the English governor, but not until amended so as to enable him to control the school in the interests of the established church and the Crown. When, by its own terms, the provisions of this measure expired, seven years later, nothing was done to renew or continue them.

Indeed, all the English schools in the province from 1700 down to the time of the Declaration of Independence were maintained by a great religious society organized under the auspices of the Church of England, and, of course, with the favor of the Government, called "The society for the propagation of the gospel in foreign parts." The law governing this society provided that no teacher should be employed until he had proved "his affection to the present government," and his conformity to the doctrine and discipline of the Church of England." Schools maintained under such auspices and influences were in no sense free schools.

Indeed, as humiliating as it is, no student of history can fail to discern the fact that the Government of Great Britain, during its supremacy in this territory, did nothing to facilitate the extension or promote the efficiency of free elementary schools among the people.

I observe with interest, in this connection, that Mr. Edward Eggleston, in a most readable article concerning the early English colony in Virginia, which appears in the July number of the Century Magazine, states that the policy of the English Government touching schools in that colony was precisely what we have found it to be in New York. In all the colonies it was what we might have

expected to find. The nobility reasoned that poor men and ignorant men could be governed, and that learning brought disobedience and heresy into the world, and kings and princes, lords and earls and dukes acted in accord with their beliefs.

If the English nobility did nothing to extend elementary schools, the Dutch were largely indifferent to advanced schools. Their leading men were merchants whose sons went from the elementary schools into the affairs of trade.

It was precisely the same considerations which led the English to treat the elementary schools with indifference that also led to the organization and shaped the policy of the first college in the State. Its business was to educate leaders to the tenets of the State church, so far as religion might go, and who would sympathize and agree with the English aristocracy, so far as politics were concerned. Twenty years after the organization of this college its officers requested a royal charter granting special privileges. In a letter transmitting this request, and urging that it be granted, Cadwallader Colden, the lieutenant-governor of the province, concludes as follows: "It therefore seems highly requisite that a seminary on the principles of the Church of England be distinguished in America by particular privileges, not only on account of religion, but of good policy, to prevent the growth of republican principles, which already too much prevail in the colonies."

My limits will not allow me to spend more time in referring to the educational facts bearing upon the colonial period. We must be content, for the present, with the statement, which is abundantly supported by the facts, that under the mistaken policy of the English rule the schools languished, and during the progress of the war for independence, which raged with great fierceness over our territory, they were nearly or quite obliterated. The fury of war had closed the doors or entirely extinguished the single college and, practically, all of the academies and schools.

REVIVAL OF LEARNING AT CLOSE OF THE REVOLUTION.

With independence and free statehood came a renewed interest in education and a strong impulse toward the advancement in learning. The foremost statesmen deemed the subject worthy their closest attention. Immediately upon the advent of peace Governor George Clinton said to the legislature of 1784: "There is scarce anything more worthy your attention than the revival and encouragement of seminaries of learning." In a communication to the same legislature, asking for a revision of their charter, the few remaining governors of Kings College stated that the greater part of their number "had died out or departed from the State," and that many parts of their charter "are inconsistent with that liberality and that civil and religious freedom which our present happy constitution points out."

In answer, came an act changing the name from "Kings" to "Columbia," under which the old institution played a most important part in the formative period of the Commonwealth and the Republic. In time she accumulated means and gathered honors about her, and now, under the presidency of a young, accomplished, and vigorous man, whom we heard with so much satisfaction last evening, seems to be entering upon a career of unwonted brilliancy and still more widely extended usefulness.

The act in May, 1784, reorganizing this college, created the State board of regents. In theory and intent the regents were constituted a board of trustees of the existing college, with authority to organize additional colleges and "seminaries," and exercise similar authority over such as should be organized. In fact, the board only transacted the business of the single college for three years, and in that time experienced innumerable obstacles and difficulties.

BOARD OF REGENTS PROPOSE ELEMENTARY SCHOOLS.

This original board of regents was the first representative body since the Dutch rule to make any official or public deliverance looking to the organization of a State public school system. Technically, it had no legal authority or responsibility concerning elementary schools, and it so understood. Indeed, there were no such schools at the close of the war, and the prevalent, if not the universal, idea was that society itself was not chargeable with any responsibility in that connection. But the wisest statesmanship of the day was in that board of regents. In a musty book of records, now in the archives of Columbia College, and as to the custody of which that institution and the board of regents have held contrary opinions, there is to be found the journal of the board during the three years when that college constituted the entire university, and when the functions of the regents were mainly confined to the supervision of the same. In this book there is a record which is certainly of interest to us.

On the 31st of January, 1787, the board appointed a committee, in the language of the record, "to take into consideration the present state of the university, and to report as soon as possible the measures necessary to be adopted to carry into effect the views of the legislature with respect to the same, and particularly with respect to Columbia College." The committee consisted of the mayor of New York, and Messrs. Jay, Rogers, Mason, Livingston, Clarkson, Gros, and Hamilton. The report was presented at a meeting held February 16, 1787, adopted, and ordered to be transmitted to the legislature. From the nature and verbiage of this report, as well as the order in which the names of the committee appear, it seems reasonably clear that Hamilton drafted it. After setting forth the various difficulties which the board had experienced and suggesting the necessary remedies, the committee went outside of its prescribed duty and, so far as I know, made the first public and official presentation of the necessity of common schools maintained by public authority, in the following words:

"But before your committee conclude, they feel themselves bound in faithfulness to add that the erecting of public schools for teaching reading, writing, and arithmetic, is an object of very great importance, which ought not to be left to the discretion of private men, but be promoted by public authority. Of so much knowledge no citizen ought to be destitute, and yet it is a reflection as true as it is painful that but too many of our youth are brought up in utter ignorance. This is a reproach under which we have long laboured unmarred by the example of our neighbors, who, not leaving the education of their children to chance, have widely diffused throughout their State a public provision for such instruction.

"Your committee are sensible that the regents are invested with no funds of which they have the disposal, but they nevertheless conceive it to be their duty to bring the subject in view before the honorable the legislature who alone can provide a remedy."

Nothing came of this. The legislature passed the act which the board submitted, but it contained no mention of common schools. It is impossible to discern in any of these early educational statutes any acknowledgment of the principle that the State should be responsible for elementary schools. They provided for and aided colleges and academies only, quite possibly in the belief that thereby elementary education would be promoted indirectly and perhaps most effectually.

GOSPEL AND SCHOOL LANDS.

It is indeed strange how little mention there was of schools in those early legislative sessions. In a comprehensive act of the legislature in February, 1789, providing for the sale of certain public lands of the State, the surveyor-general was directed to lay out twenty townships, so that each should contain 100 lots of 250 acres each, and sell the same, except that he should reserve, near the center

of each township, one lot, which should be devoted to the support of the gospel, and one other to the support of schools. Here is the origin of the gospel and school moneys which have mystified so many minds. This action, however, contained no recognition whatever of the common-school principle. It was only an admission of the propriety of public encouragement to churches and schools, and that on equal terms.

FIRST STATUTE FOR AN ELEMENTARY SCHOOL.

In 1791 an act was passed authorizing six gentlemen, of whom the first was Robert R. Livingston, to receive certain moneys arising from excise fees and fines in the town of Clermont, in the county of Columbia, and "not wanted for the relief of the poor," and to build a schoolhouse and maintain a school therewith. Here is the first authority of the new Commonwealth for an elementary school. But it meant little. It levied no tax. It permitted a town to use for a school moneys which would legally go to the support of the poor, and which were not needed for that purpose. It put the almshouse and the school on about an equal footing.

FIRST GENERAL STATUTE ENCOURAGING ELEMENTARY SCHOOLS.

But in six years after their first utterance, the board of regents recurred to the matter persistently and heroically. In 1793 and 1794 and 1795 the board urged the matter in their annual reports, and the stanch old governor likewise talked strongly and soundly in the legislative ear. In the latter year he spoke in this fashion:

"While it is evident that the general establishment and liberal endowment of academies are highly to be commended, and are attended with the most beneficial consequences, yet it can not be denied that they are principally confined to the children of the opulent, and that a great proportion of the community is excluded from their immediate advantages. The establishment of common schools throughout the State is happily calculated to remedy this inconvenience, and will therefore engage your early and decided consideration."

These influential appeals brought from the legislature of 1795 a law entitled "An act for the encouragement of schools," which became the substantial corner stone of a State elementary school system. It appropriated $100,000 each year for five years from the State treasury "for the purpose of encouraging and maintaining schools in the several cities and towns of this State, in which the children of the inhabitants residing in the State shall be instructed in the English language, or be taught English grammar, arithmetic, mathematics, and such other branches of knowledge as are most useful and necessary to complete a good education."

This was a grand and noble thing to do. The appropriation was munificent when we consider the valuation upon which it was levied. The entire assessable valuation then was but about $100,000,000. The same rate upon our valuation would yield nearly $3,500,000 as the annual State appropriation for common schools now, which, by a curious coincidence, is precisely what the State does appropriate. The State was then heavily in debt; it is free from debt now. But in addition to the appropriation, the act required each town to raise by tax half as much more as it received from the State appropriation. It did not authorize this; it required it. In the assembly, when the bill was under consideration, a motion was made to provide that each town should share in the appropriation only upon condition that it should raise one-half as much more by local taxation. The proposition was voted down. The house said, No, there shall be no conditions or uncertainty about it. We will make this appropriation; we will require each town to raise half as much more as we give it, and we will set up the machinery

which will insure its proper expenditure for elementary schools. This was not only a grand and a noble, but it was a heroic thing to do.

But in other ways this first general school law reveals the handiwork of the best statesmanship. It stated the purpose of the law accurately and felicitously. It provided a system for allotting the appropriation and for the annual election of not less than three nor more than seven commissioners in each town, who were to supervise and direct the system. This appropriation was not intended to pay the full expense of the schools. It was only to assist. It was reasoned that the people in localities would associate together because of this assistance, and open schools. The act contemplated the organization of school districts in the country, provided for the election of trustees, and set forth their powers and duties. In short, it brought into being the elements of a State school system, and gave shape and form to that system, in essential particulars, as it exists to-day.

Wise and courageous as were the men who framed this great statute and breathed the breath of life into a common-school system (and they were wise and courageous beyond their generation), yet they had no conception of, and gave no adhesion to, the doctrine now pervading the school system, that it is the duty of the State to provide by common tax an elementary school within easy access of every home, and that a good English education at general expense is the rightful inheritance of every child of the Commonwealth. They advanced to the point of believing that the State should encourage schools, and even to the point of believing that it might rightfully do this in a substantial way through its power to levy and collect taxes. But they still believed that, primarily, the responsibility rested upon each individual to educate his offspring, and that only when he failed to do this, private or public charity might properly aid the unfortunate.

It seems strange, in view of the fact that the State had previously confided its educational interests, so far as it had acted at all, to the board of regents, and that the common-school system was established largely through the influence of that board, that it did not give the regents supervision of the new system. But it did not do so. On the contrary, the bill recited that special provision had previously been made for encouraging colleges and academies and provided that nothing contained in this act should be construed as extending to such institutions.

In 1800 a strong movement was made for continuing the provisions of the act of 1795 for another five years. It succeeded in the house, but failed in the senate, near the close of the session, by a close vote. Each succeeding year for five years the governor urged the subject, but nothing was done. Evidence is not wanting to show that the unfortunate delay and neglect resulted from differences as to the best course to pursue, and particularly as to whether the administration of the system should be given to the regents. In 1805 the foundations of a permanent common school fund were laid, and from that time, in spite of some neglect and hindrances innumerable, the common-school system has, with unvarying uniformity, grown in strength and in efficiency. In 1798 the reports received showed the organization of 1,352 schools, with 59,660 pupils. In 1815 there were 2,755 districts and 140,106 pupils. In 1830 there were 9,063 districts and 499,424 pupils. Last year there were 1,803,667 pupils in the common schools of the State.

PUBLIC SCHOOL SOCIETY OF NEW YORK CITY.

Even the briefest narration of the development of the State school system would be unfaithful which failed to make mention of a great organization known as the "Public School Society of the City of New York." It was chartered by the legislature in 1805, and was composed of the foremost citizens of the metropolis. Its object, as stated in its charter, was to establish "a free school in the city of New York for the education of such poor children as do not belong to or are not provided for by any religious society." This illustrates the prevailing sentiment of

the time concerning the relation which society should sustain to common education better than any language of mine can do it. In acting up to the spirit of the times, and in carrying out the beneficient objects for which it was created, this society won the gratitude of the ages. It received public and private contributions and tuition fees for the support of its work, it controlled all the public schools in the city for nearly fifty years, and exerted a strong influence upon the educational opinion of the country. At its dissolution in 1853 it had supervised the instruction of 600,000 children, and it turned over to the board of education of the city of New York property worth more than $450,000.

What this society was doing in the city of New York was being done in one way or another, to a greater or less extent, by associated effort in all the cities and towns of the State.

GROWTH OF THE SYSTEM.

The fact that the State assumed to regulate the affairs of the schools to some extent, as well as the aid which it gave them, coupled with the growing public interest in them and the ardor of the professional educators, steadily promoted the growth and development of the system till, in the judgment of the most competent and impartial witnesses, it clearly led the educational work of the country. In his annual report for 1845 Horace Mann, secretary of the board of education of Massachusetts, says: "The great State of New York is carrying forward the work of public education more rapidly than any other State in the Union, or any other country in the world." And Henry Barnard, of Connecticut, at the first meeting of your association in the same year, said: "I have watched the progressive improvement in the organization and administration of the school system of this great State with intense interest, and regard it at this time as superior to any other of which I have any knowledge, for its extent, its liberality, its efficiency, and the general intelligence and activity with which its widespread affairs are administered." These will be recognized at once as great names—perhaps the greatest—in the history of common-school development in the country.

THE RATE BILL.

The early legislation seems to have been framed on the belief that the income of the State school fund and the tax equal to one-half its share, which each district was required to raise, would support the schools, but this was found to be inadequate, and then it was provided that the schools should be maintained a specified time each year and that any deficiency in funds should be collected from the patrons of the schools in proportion to the attendance of their children. This gave rise to the "rate bill." It was only a tax levied upon parents in proportion to the number of days which their children attended the school. The amounts raised in this way were not inconsiderable. In 1830 it was $374,000; in 1840, $475,000; in 1867, the last year of the system, it was $709,000. The average sum annually collected by rate bill in the forty years from 1828 to 1868 was $410,685.66.

The greatest contest concerning schools which the State has known was over the abolition of the rate bill and the consequent establishment of absolutely free schools. Every man here past 50 years of age, who is accustomed to be interested in affairs, will feel the blood coursing more rapidly through his veins at the remembrance of the fight for schools free to all and maintained at public expense. I fear none of the ladies are old enough to recall it.

The system became odious. It discriminated against the poor. Although it permitted trustees to excuse such from paying fees, no self-respecting man could suffer himself to be publicly adjudged to be poor by a school trustee. It afforded a good excuse or plausible pretext for nonattendance. It was attended with many misunderstandings and disputes, and promoted demoralization in many ways. Sentiment was deeply agitated and found expression in every direction.

In 1849 the legislature submitted the question to a vote of the people, and the returns showed 249,872 in favor of making "the property of the State educate the children of the State," and 91,951 against it. The opponents were not content. In 1850 they procured legislation resubmitting the question, and the returns showed 209,616 against the rate bill, and 184,303 for the old system. Still the opponents were not content. In 1850 a kind of compromise was effected, and the controversy was attempted to be settled by restoring the rate bill and levying a State tax for $800,000, to be distributed with the school money. This tax, increased to larger amounts, has been annually raised since, and is technically known as the "free-school fund."

But, as a general thing, the cities would not tolerate the rate bill. At their solicitation the legislature, from time to time, passed special acts creating a board of education with general powers and duties, and in this manner set up an organized school system in each city. These special laws ordinarily authorized taxation adequate to the entire support of the schools, and thus the rate bill became obsolete in most of the cities at a comparatively early day.

In the meantime the "union free-school district system" became legally permissible, and met with considerable favor. It authorized districts to combine and establish a graded school and meet the expenses by a general tax, thus obviating the necessity for the rate bill in communities adopting it. In 1867, under the impetuous and able leadership of Victor M. Rice, the rate-bill system was finally abolished, and the principle that the schools should be absolutely free to all and supported at public and general expense was fully and triumphantly established.

WHAT HAS PROMOTED THE GROWTH OF THE COMMON-SCHOOL SYSTEM.

Now, permit me, in as few words as I can well employ, to speak of the distinguishing characteristics which have made our State school system the leading influence in developing the intellectual and therefore the material life of the Commonwealth, and have constituted it a model for other States, so far as their representatives have had the foresight and the courage to follow it. It may fairly be said that these are four in number:

1. State support
2. Extent and manner of supervision.
3. Technical training of teachers.
4. Cooperative effort.

STATE SUPPORT.

The State has not at all times done all that her ardent educators have asked. Her generosity has been so munificent that their standard has been high and their expectations great. For many years her authority has been potent and her bounty plenteous. Passing the first splendid appropriation, before the dawn of the nineteenth century, to which I have previously adverted, we find that in 1805 she laid the foundation of a permanent common-school fund, and provided for its increase, until last year it amounted to $4,000,000. Acting upon the commonly accepted theory of the times, large sums were appropriated year after year to encourage schools. At an early day the State began the policy of requiring localities to raise by tax such additional amounts as were necessary to maintain schools, and authorized all communities to levy such additional amounts as they saw fit for the same purpose.

More than fifty years ago the State initiated the school district library system, and since that time has annually made a liberal appropriation to maintain the same. It is true that portions of this money have been diverted to other uses and that the whole matter needs revision now, but it is equally true that the millions of volumes which the fund has supplied greatly enhanced the efficiency of the schools and promoted the mental growth of the people of the State. In 1851 it

disavowed the old doctrine that education was the rightful inheritance of the opulent, but ought to be doled out in reasonable quantities as a charity offering to the poor, adopted the principle that the property of the State should educate the children of the State, and began regularly to levy a State tax for schools, and commenced the annual appropriation of the "free-school fund." Under this policy the amount raised by general and local taxation for common schools in the State has rapidly advanced from $1,600,000 in 1850 to $3,700,000 in 1860, $10,000,000 in 1870, and nearly $17,000,000 last year.

In 1866 the State extended to local authorities the power to acquire land for school sites by the right of eminent domain. It is a lesson which the States of the Union have been slow to learn, and which some of them will apparently never learn, that the efficiency of a school system must necessarily depend largely upon the extent of support and the proper but complete exercise of State authority. Men who understand it not uncommonly lack the courage to say so. The Empire State appreciated this fact early, earlier than any other, and her statesmen have acted with wisdom and courage in the matter. Now for many years the authority and power of the State have been freely exerted in innumerable ways to the extension and betterment of school property and the improvement of the schools.

EXTENT AND MANNER OF SUPERVISION.

When New York first took action looking to the organization of common schools, town commissioners, with trustees in subdistricts, were provided for. When the time came to set about reducing the disconnected schools which, under her aid and encouragement, had been organized in her cities and towns and along her picturesque hillsides and valleys into something like an organized and related system, she did it through a general system of supervisory officers, a plan which has since been put in operation in all the States of the Union, but in the adoption of which she clearly led the way.

In 1812 an act was passed providing for the appointment, by the counsel of appointment, of a State superintendent of common schools. The same statute also provided for the election in each town, at the annual town meeting, of three commissioners to superintend and manage the affairs of the schools within their town. In 1814 this statute was reenacted with some amendments, among which was a provision that there should also be chosen at each town meeting "a suitable number of inhabitants, not to exceed six," to act with the three commissioners as inspectors of common schools.

Upon the office of superintendent of common schools being established, Gideon Hawley, then a young lawyer, and whom I recollect as a pleasant and dignified old gentleman on the streets of Albany sixty years later, was appointed to fill it. His vigorous intellectual powers and his devotion to the duties of his position brought a stately and compact system out of disorganization, chaos, and confusion, and gained for him a large share of public confidence and esteem. But he did not get on well with the wicked politicians with which the State seems to have been infested in those early days. The counsel of appointment removed him just prior to the expiration of its own life, as provided by the constitution of 1821, and appointed Welcome Esleeck in his place. So strong was the public indignation concerning this act that the legislature promptly abolished the office of superintendent and devolved the duties thereof upon the office of secretary of state.

Chapter 260 of the laws of 1841 is very important in that it provided for the appointment, by the board of supervisors in each county, of a deputy superintendent of common schools for the county, except that in counties having more than 200 school districts they were to appoint two deputies. Here we find the beginning of the county or district commissioner system.

In 1843 the offices of town commissioners and inspectors were abolished, and provision was made for the election in each town, at town meeting, of a "town superintendent of common schools."

In 1847 the office of county deputy superintendent or county superintendent, as it had come to be called, was abolished.

In 1854, by a bill introduced by Hon. William H. Robertson, then and now the senator from the Westchester district, and always the steadfast and able friend of the schools, the State department of public instruction was organized and the office of superintendent of public instruction was created.

In 1856 the office of town superintendent was abolished and that of school commissioner was again created.

Thus it will be seen that we have had supervision by State officers since 1812, by county or district officers from 1841 to 1847 and from 1856 to the present time, and by town officers from 1795 to 1856. The general features of this comprehensive plan of school supervision have affected the development of the school system most advantageously.

EMINENT SUPERINTENDENTS.

In the list of State superintendents some very eminent names appear.

Gideon Hawley was, in his way, truly a great man. Of lofty personal attributes and great natural dignity of character, yet modest and retiring in demeanor, he was methodical, painstaking, and persevering to the last degree, the ideal man through the period of construction and organization. For the paltry sum of $300 per year he perfected a system for the management of the school fund and for the organization of districts, provided for the fair and equitable distribution of the bounty of the State in each district, and set in operation the vast and intricate machinery of the State school system. The State never rewarded him for his disinterested labors, but posterity will not withhold the credit which is his due.

Particularly fortunate was the State in its general superintendents from 1826 to 1845. This period is covered by the continuous administration of four great men—Azariah C. Flagg, John A. Dix, John C. Spencer, and Samuel Young.

The first had been in the legislature several years before coming to this work, and went from it to the office of comptroller of the State, which he filled from 1834 to 1846, and rounded out a reputation as one of the truly eminent men of the State.

Of General Dix the world knows. Before he put his great natural and scholastic abilities at the service of our school system he had been on a special and delicate mission to Denmark and received high military honors, including the office of adjutant-general of the State. He afterwards held innumerable positions of public trust, including those of Secretary of the Treasury, United States Senator, major-general in the United States Army during the civil war, and finally governor of this State.

Mr. Spencer was a graduate of Union, and had served one term as attorney-general, one term in Congress, and two in the State senate, and had served as a commissioner in the revising of the statutes of the State before he became superintendent of common schools, and was Secretary of War and Secretary of the Treasury afterwards.

Samuel Young had been in each house of the legislature, had served as canal commissioner from 1816 to 1840, and was the Democratic candidate for governor against Mr. Clinton in 1824. Incidentally it is amusing to recall that in more illiberal times than these he once denied an application to revoke the certificate of a teacher for dancing, card playing and drinking on the ground that he did the same things himself when a young man.

I speak of these four men with some particularity, not so much because they otherwise attained such great prominence as to recall the qualities which they

brought to the discharge of the duties of superintendent, and to point out their influence upon the affairs of the schools. They occupied the office through a trying and critical period. They enjoyed the office and filled it. They shaped the policy and gave tone and substance to the whole system. Their decisions have, in many instances, become the common law of the schools. Their strong sense of right and their uncompromising steadfastness constituted a secure fortress against which the waves of ignorance, prejudice, and controversy might beat harmlessly and without effect. Other names are entitled to a place upon the bright side of the temple of fame and to share in the gratitude of the commonwealth for exerting an exceptional influence in behalf of her schools, but it was the matchless leadership of these four great men from 1826 to 1845 which, according to Horace Mann and Henry Barnard, placed the New York system in the advance of all the rest at the end of that period.

To every one of the old State superintendents may be traced some prominent feature of our present school system. Besides those whose names I have mentioned, Nathaniel S. Benton and Christopher Morgan, Henry S. Randall and Elias W. Leavenworth, Victor M. Rice and Henry H. Van Dyck, were strong men, all of them. The aggressiveness of some of them, and the substantial conservatism of others, perhaps in equal degree, have impressed themselves upon the work of the schools and so combined all in a common system as to carry the best feature of each to all the remotest parts of the State.

NECESSARY AUTHORITY.

The extreme decentralization of authority, the mistaken idea that the operation of the schools should largely be left to local direction, has been a great drawback upon American public schools. The power and authority which, at a very early day, this State vested in its school department has given it an advantage over its neighbors which they will recover only with extreme difficulty. It is possible that this authority has been injudiciously or erroneously exercised upon occasions. I do not believe it has ever been exercised maliciously or influenced by unworthy considerations. In any event, the presence of such an exalted power, the fact that it may be speedily and conclusively exercised, and that, ordinarily, it is well exercised, has quelled disputes, shaped policy, directed and applied energy, procured support, concentrated effort, made the school system the creature of the State, and in innumerable ways promoted its healthful and productive activity. For the same reasons, if not in equal degree, local supervision has been helpful to the development of the school system. The work of the city superintendent and the county commissioner has promoted uniformity, put out incompetency, aided and encouraged the timid, directed the strong, curbed the passionate, and in more ways than can be mentioned given effectiveness to the means and the energies devoted to the service of the schools. In short, the system of supervision which is everywhere present, with its authority to regulate buildings, certify teachers, control all the concerns of the schools, and which is required to collate and report the facts, and is held in a large measure responsible for results, has been a potent influence in advancing the character and efficiency of the schools.

PROFESSIONAL TRAINING OF TEACHERS.

The next feature which must attract the attention in investigating the causes which have been most potential in advancing the State free school system is the continuous and costly effort to improve the teaching service. Aside from an exceedingly small number of prominent positions, the compensation of teachers has, from the beginning, been so moderate that persons with the required qualifications would be allured to other occupation by larger remuneration.

It must be admitted, also, that the uncertainties and humiliating conditions sur-

rounding a teacher's employment are frequently such as to drive an independent and self-respecting person to other work at no better pay. For these and other reasons not necessary here to enumerate, the greater number of persons who commence teaching do so upon the understanding that it is only a temporary expedient and not a permanent means of livelihood. This has made it exceedingly difficult to secure the requisite number of persons completely or even measurably adapted to the instruction of the schools. This has been largely so from the beginning, but the fact has been more prominent in recent years because the qualities which constitute a good teacher, and the vast importance of having such qualities in every schoolroom, have come to be so much more generally understood.

The best statesmanship of New York appreciated this matter from a comparatively early date, and at once began special efforts for training competent teachers for the schools. In his annual message to the legislature, in 1826, Governor DeWitt Clinton referred to the subject in these words:

"With a full admission of the merits of several who now officiate in that capacity, still it must be conceded that the information of the instructors of our common schools does not extend beyond rudimental education: that our expanding population requires constant accessions to their numbers; and that to realize these views it is necessary that some new plan for obtaining able teachers should be devised. I therefore recommend a seminary for the education of teachers. A compliance with this recommendation will have the most benign influence on individual happiness and social prosperity."

In his annual message in 1827 the governor recurs to the subject with added emphasis, and goes so far as to recommend a central school in each county for the special education of teachers. In that very year the legislature added $150,000 to the capital of the literature fund "to promote the education of teachers."

From this time there was much discussion of the subject until a statute was enacted in May, 1834, which authorized the regents to spend a portion of the literature fund in specially educating teachers, and this brought into existence the teachers' classes in the academies. The sum of $500 was given to purchase books and apparatus for an academy in each of the senate districts as they then existed, and the further sum of $400 was given for the support of an instructor in each academy.

The classes for teachers were opened in these academies in the autumn of 1835. In succeeding years the appropriations were increased, and thus the number of classes was multiplied. This work has been continuous to the present time. A year ago the supervision of these classes was transferred from the board of regents to the department of public instruction, and this year the appropriation was raised from $30,000 to $60,000.

In April, 1843, the first teachers' institute was held at Ithaca. There were 28 teachers present, and the session continued two weeks. These gatherings of teachers were at first voluntary, but soon came to be regulated and supported by the State. In later years they have been held with regularity in each commissioner district, and teachers have been paid for attendance, while attendance has been compulsory.

In 1844 the first State normal school was opened at Albany. Others have been established from time to time until now there are ten of these institutions, and the eleventh is to be opened in the coming autumn. These schools have real estate worth $1,400,000, and furniture and apparatus valued at $150,000 more. Last year they had, all told, 6,468 pupils and graduated 537. The State paid for the maintenance of these institutions last year $272,581.85. In March last the name of the original school was changed to that of "The New York State Normal College," and it will hereafter receive only pupils who have more fully completed their work in subject-matter in the ordinary schools, and will devote its entire

time to the technical training of teachers not only for the elementary but the advanced schools.

In 1870 the city of New York[1] opened a normal college for the purpose of preparing teachers for the public schools of that city, and from which the supply is largely drawn; and in nearly every other city of the State special schools or classes are continually maintained for the same purpose. In most cities of the State no teachers are certified or employed who, in addition to scholastic attainments, do not show a year or more of professional training. A bill to establish this principle in all cities and villages employing a superintendent of schools passed the last legislature with but little opposition, and only failed to become a law for want of the approval of the governor. The law would only have hastened matters somewhat. The inevitable trend is in this direction. The city that does not exact as much will soon find itself behind the times. With or without law the time will soon come when some special and technical training will be exacted on the part of all persons seeking employment in the schools of our cities and villages.

In the country the uniform system of simultaneous examinations for teachers and the multiplication of teachers' training classes in the academies and union schools are leading steadily in the same direction.

The Empire State has a proud record upon this matter, and I refer to it with pride and satisfaction. She commenced the work of training teachers early. I do not claim for the fathers who inaugurated the work sixty years ago a very clear comprehension of the problems involved. They probably knew but little of psychology and pedagogy. They were not thinking of technical or professional training.[2] They were looking for teachers who had knowledge without much reference to the art of transmitting it successfully.

In making provision at public expense for even the education of such they builded up academies in all parts of the State, and created centers where learning glowed to radiate and illumine all the country round about. They reared and trained scholars who, in their turn, stimulated and promoted educational and public-school development everywhere. They heightened the general intelligence, and hastened the time when the common sentiment of the people will forbid that helpless children shall be delivered into the care of other children, or of weaklings and unfortunates on the one hand, as well as the unfit favorites of small politicians on the other. They opened the way for the early understanding of the difficult problem involved, and the general acceptance of the proposition that teachers in the schools must be not only liberally educated, but specially and technically trained, or come short of the requirements of the service. All honor to the statesmanship which inaugurated as well as to that which has since sustained and prosecuted this work so intelligently and generously. It has contributed more than it knew to the intellectual and moral health of the commonwealth.

VOLUNTARY ASSOCIATIONS.

The remaining great influence which has promoted the healthful development of our public-school system, and which I shall feel justified in taking time to consider, is that of the voluntary associations of the friends of education, and particularly of teachers. This influence has been a most consequential one. The order in which I mention it must not be accepted as an indication of its importance. I think you will find the subject interesting. I know you would if there was time to thoroughly investigate it.

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[1] They borrowed from France and Germany.

[2] Note the new college in New York City for training of teachers.

"SOCIETY OF ASSOCIATED TEACHERS," NEW YORK CITY, 1794.

In the custody of the State library at Albany, in company with the original André papers, the original copy of President Lincoln's Emancipation Proclamation, the original of Washington's Farewell Address, there is a manuscript volume of more interest to us than any of them. It is the original minutes of the first permanent or continuing teachers' association in America. It was an association of schoolmasters, organized in New York City in May, 1794.

The minutes are neatly and correctly kept, and indicate that any one of the secretaries would have been able to pass the State examination if they had had mechanical contrivances for testing the qualifications of teachers in those days. The journal shows that meetings were held with much regularity at least till 1807. The first meeting was held May 15, 1794, at the schoolroom of "Citizen Gad Ely." The first resolution adopted after agreeing to organize was one "that the person filling the chair for the time being be authorized to call to order any member when necessary." The fact that this precaution was deemed necessary will at once put us on terms of easy fellowship with these early teachers. John Wood was chosen chairman, and John Winchell secretary. Fifteen persons were present at the first meeting. Opposite nearly every name in the list, some hand has written the words "since dead." It was essentially a secret society. It may seem superfluous, therefore, to state the related fact that no ladies were admitted. Members were elected by ballot, requiring a three-fourths vote to elect, and were received into membership by an initiatory ceremony. The admission fee was $1. Meetings were held in the schoolrooms or at the residences of the members, and ordinarily about every week.

From the 21st of March to the 21st of September the association met at 8 o'clock and adjourned at 10, and from the 21st of September to the 21st of March it met at 7 and adjourned at 9 o'clock. The time of meeting suggests early hours and regular habits in somewhat striking contrast with those observed by their successors in office. Six shillings were paid to the secretary that he might purchase a record book, and he secured a good one, bound in leather, every page of which is water lined, with an English coat of arms and the letters "G. R.," in remembrance of the fact that one of the Georges was King.

On July 21, 1794, the common council granted the association the right to meet in the common council chamber "at such time as the same shall not be occupied by the public on business or by the Society for the Promotion of Christian Knowledge, the Medical Society, or the St. Cecilia's Society." With the assurance of a veteran the infant at once drew on the St. Cecilia's Society to change its night of meeting for the better convenience of the schoolmasters' association.

The officers were a president, secretary, and steward. They served for three months, were required to take an obligation or pledge to perform faithfully the duties of the several offices, and the president and secretary were fined 25 cents and the steward 18¾ cents for each absence, unless excused.

But with all these incidental matters, which inspire a smile, this association did substantial work. Its proceedings were of practical interest and importance. The association assumed to act as a breakwater against incompetency in the schools. A committee of seven was appointed to examine persons wishing to teach, and such as they found worthy they certified to be so. It is to be hoped that they did not forget that they were once young and inexperienced themselves. The association also examined and recommended text-books, and evidently compelled such text-book publishers as there were to treat the society with proper and becoming respect. The city library conferred upon the association one membership right in that institution, and a "reader" was appointed to examine the books and report any information he might receive for the good of the society.

When any student was so disorderly as to oblige the master to expel him the facts of the case were reported for the information of all. The association assisted its members in collecting tuition fees from slow patrons. Among the subjects considered the following are observed, viz: "Is silent study or studying aloud most conducive to the improvement of scholars?" "Whether a systematical method of teaching penmanship is more eligible than such methods as are commonly pursued?" "Whether the practice of good flagellations by the tutor is advantageous to the good regulation of a school?" "Whether it is better to subject the passions to reason or root them out?" "Ought any religion further than morality be inculcated in the schools?" "Whether an indolent person of great abilities or one of inferior talents and assiduity makes the best teacher?" "Is the same mode of education equally applicable to the male and female sex?"

They decided that a "theater, under the usual regulations, was not unfavorable to morals;" and that "the present situation of affairs was unfavorable to matrimony;" that "it would not be good policy to manumit slaves in America immediately," and the association seems to have gone to pieces in trying to decide whether "the mental powers of the aborigines of North America were equal to those of the Europeans."

These reminiscenses of this the earliest of teachers' associations might be continued almost indefinitely. But so much must suffice for the present. It was a primitive organization but it shows a devotion to their calling on the part of these old teachers. With steadfast earnestness they continued for thirteen years at least to maintain a teachers' association for mutual improvement and the advancement of their schools. They had no precedents to guide them, no successes and failures to light their path. They did not copy; they originated. History has not yet done them justice, but it may not always be so. The State Teachers' Association may well stand with uncovered head while it respects and honors their memory.

OTHER LOCAL ASSOCIATIONS.

From the time when the State really assumed a share in the support and supervision of schools, city, county, and town associations of teachers became common and have no small part in determining the characteristics of the school system. Almost every page in the early books and periodicals related to the interests of education reports the doings of these local associations. As early as 1830 the State superintendent headed a movement for the organization of county and town associations and for the holding of public celebrations, and as a result there was marked activity in the way of organizations in all directions and a notable increase of public interest in all the affairs of the schools.

FIRST STATE CONVENTION OF TEACHERS.

The first State convention of teachers in this State, and the first in any State, so far as my investigations have gone, was held at Utica in October, 1830. Undoubtedly a thorough investigation would reveal the circumstances which led to this gathering, as well as the facts touching its character and its transactions. It is shrouded in some mystery, however. I am certain of but one thing concerning it, and that is that it resolved upon and provided for calling a future convention.

The fact that it called another convention only three months later indicates that it was a slim affair and did little, if anything, beyond this. The next State teachers' convention was held at Utica January 12, 13, and 14, 1831. Rev. Henry Davis, D. D., of Hamilton College, was president. Most of the counties were represented, and most of the names of the active school men of the day appear in the roll of the convention, but we examine it in vain for the name of a woman. Com-

mittees were appointed as follows, viz: On the qualifications of teachers; on the studies and exercises proper for common schools; on appointing one or more agents for carrying into effect the objects of the convention; on the construction and furnishing of schoolrooms; on the school law of the State.

The question as to whether the State should establish normal schools or utilize the academies for educating teachers was as hot then as it ever has been since. The convention, for obvious reasons, declared in favor of utilizing the existing schools.

The committee on "Studies and exercises in the schools" reported that the following studies should be pursued, viz: Reading, writing, spelling, mental and practical arithmetic, geography, English grammar, composition, a method of keeping accounts, some brief systems of political economy, and some of the simpler parts of the natural sciences." The committee observe that they are aware that their list is too large to be pursued in a single school, especially if the number of pupils is large. They urge, by way of a solution of the difficulty, that one teacher should never have charge of more than 30 or 40 pupils, and that where the school is larger than this grading should be resorted to. The committee urge, among other things, that the schools should "call into action the intellectual powers of the pupils and teach them by independent investigation to arrive at conclusions for themselves which shall be according to truth;" that pupils "should not waste time in loading the memory with what is not understood;" that they "should not be suffered to pronounce words without a knowledge of their meaning;" that in arithmetic pupils "may derive much valuable improvement by the help of sensible objects, without being burdened with rules above their comprehension."

This convention sixty years ago also faced the text-book question, but precipitately surrendered in its presence, and contented itself with saying that while the multiplicity of text-books was a great evil, still they thought it unwise for them to enter a field which would require them to discriminate, and with apparent solemnity expressed the belief that "if a remedy shall be found out for the other defects in the system of common-school instruction the text-book evil will gradually disappear."

To all of this the convention agreed. It also provided for a State agent to go about, hold meetings, arouse the people, encourage teachers, organize lyceums, etc.

The convention seems to have been in something of a fog concerning the improvement of schoolrooms. It declared that "schoolhouses are too small, the ceilings too low, the windows placed quite too near the floor, and that too little regard is paid to the ventilation of the rooms." But, in its opinion, the methods of remedying these defects were "too plain to require explanation."

Then it immediately proceeded to explain and suggest that "instead of the plain ceilings in common use arched ones might be constructed with great advantage and at little additional expense," and that "for the purpose of ventilating the rooms the contrivance should be rather to let down the upper than to raise the lower sash of the windows, as by that means the greater portion of the air rendered unfit for respiration may be easily expelled without exposing the students seated next to the wall to currents which pass through the windows or tempting them to gaze at external objects to the neglect of their proper studies." As a master stroke in the then budding sciences of school economy and school architecture, the convention proposed that all schools should adopt the plan upon which the principal room in the Lowville Academy was constructed, and proceeded to describe it as follows, viz: "The students are so seated for study that while no two of them can see each other, the instructor has a full view of all his pupils. This mode of seating pupils is easily carried into effect by having the base of the building a dodecagon or a polygon of a less number of sides separated into two unequal divisions by a partition, and in the larger division should be the seat and

table of the instructor. On the floor of the principal room there should be constructed three or four concentric ranges of seats, ascending from the center toward the periphery of the room, as in a theater, and crossed by partitions 5 feet high, regularly converging toward the instructor's seat." If pupils failed to emerge from this formidable machine with their physical, mental, and moral natures thoroughly developed and well polished off, the educational situation would seem to be in as serious a fix as the pupils were when in the box.

We must pass from this early convention, although we might pursue our investigations into its proceedings with great interest. The convention concluded its deliberations by organizing a New York State Lyceum and by adopting an address to the public in which it set forth, with much ability, the needs of the schools, and called a meeting of the "friends of education from every State in the Union," in New York city, on the first Wednesday in the following May, for the formation of "a National Lyceum—a republic of letters, coextensive with one political confederacy, whose aim it shall be to establish, as far as practicable, a universal system of education, reciprocally to yield and enjoy the advantages of each other's discovery, to bind ourselves to firmer union by the humane yet intimate association of literature and science, and relieve the asperities of conflicting interests and selfish jealousies by the interchange of intellectual treasure."

OTHER STATE CONVENTIONS.

Other conventions were subsequently held, but not with regularity, until 1845. One occurred at Albany in September, 1836, and another at Utica in May, 1837. In May, 1842, a State convention of county superintendents was held at Utica, which was presided over by Jabez D. Hammond, the author of the "Political History of New York." Forty-two of the fifty-nine counties were represented, and Colonel Young, the State superintendent, Horace Mann, and many eminent men were present and participated in the deliberations. Subsequent gatherings of the same character were held at Rochester in 1843, at Albany in 1844, at Syracuse in 1845, and at Albany again in 1846.

PERMANENT ORGANIZATION OF "THE STATE TEACHERS' ASSOCIATION."

A most important convention assembled at Syracuse on July 30 and 31, 1845, if its importance is to be measured by permanent results. It was the first meeting of a permanent and enduring State teachers' association. On the first day 185 delegates were present from thirty-two counties. On the next day 300 teachers were present. William Ross, of Seneca, was temporary, and J. W. Bulkley, of Albany, permanent president. Substantially the first business was to invite all the text-book agents to address the convention, and Mr. A. L. Smith, of New York, agent for Smith's geography, arithmetic, grammar, and divers other books; Mr. H. H. Hawley, publisher of Perkins's mathematical series; Mr. Silas Cornell, manufacturer of globes; Mr. A. R. Boyle, a phonographist; Mr. B. Mortimer, agent for Salem Town's books, and others, overcame the traditional and proverbial modesty of their craft sufficiently to advocate their respective claims before the convention. This convention discussed ably and seriously the leading educational questions of the day, including the reading of the Bible in the schools, the necessity for pedagogical literature, school discipline, and the education and elevation of the teaching profession. It determined upon and effected a permanent organization which has met each year since, except that the meeting of 1850, which was to have been in New York city, was not held because of the prevalence of cholera. This gathering constitutes the forty-fifth in the series of annual meetings.

And what a notable and noble series of educational meetings it has been! How they have been anticipated, and how they have been remembered! What tender ties of affection have been here welded! How many minds have been here opened

to the light! The destiny of how many children has been here influenced and directed! How these meetings have affected the educational policy of the State and the United States.

OTHER ASSOCIATIONS.

At the annual meeting of the State Teachers' Association in Troy, in August, 1856, the superintendents in the cities and villages, and the county commissioners, formed the State Association of Commissioners and Superintendents. The association has met regularly since. This organization has really come to be distinctively an association of county commissioners, as the superintendents have since associated themselves together in still another organization.

On the 4th day of August, 1863, the first meeting of officers and teachers in our colleges and academies, convened by the board of regents, and since called the "University Convocation," occurred, and a similar meeting has been annually held at the capital since.

In 1883, at Syracuse, the superintendents in cities and villages met and organized the "State Superintendents' Council," and have held annual meetings at different points since.

On the 29th of December, 1885, the secondary principals of the State met in the high-school building at Syracuse, and effected an organization, which has since met regularly, and has come to be known as the "Conference of Associated Academic Principals."

Each of these organizations is in vigorous life, with a good record and excellent prospects.

INFLUENCES OF THE ASSOCIATIONS.

The beneficial influences which all these voluntary associations have exerted, and continue to exert, in behalf of the school system is inestimable.

For a great many years a little company of gentlemen with scientific or literary tendencies, and known as the "Albany Institute," has met semimonthly in that city and discussed subjects of mutual interest. The meetings are so quiet and unobtrusive that they attract but little attention, and influence the social life of the capital but imperceptibly. Yet John Ericsson gained his idea of the revolving turret for armed war vessels from a volume of the transactions of the Albany Institute, and from a paper read and long since forgotten.

Who shall say that the deliberations of any association of thinkers go for naught? And who shall undertake to calculate the extent to which all these regular and continuous gatherings of teachers have promoted the general intelligence and the mental strength of the State? There is no standard for such a measurement.

As I have read the records of their proceedings, I have been again and again struck with the fact that the leading reforms in the law governing the schools, as well as in the procedure of the schools themselves, have originated with and been accomplished through the operations of these associations. They have concentrated forces and they have distributed information. On the one hand they have removed misunderstandings, originated suggestions, carried the ripest experience and the best thought of each teacher into every city and every village and every district, and on the other hand they have combined educational effort, directed educational energy, and shaped the educational policy of the commonwealth. Each has become a power in itself, but the combined strength of all is invulnerable. Happily, fellowship between them is now so complete that no unusual movement is prosecuted without the concurrence of all, and with such cooperation the success of the undertaking is practically inevitable.

SMALL MATTERS.

I have now, in a way, covered the ground contemplated at the outset. How inadequately I have been able to do so, I am fully aware. Whether or not I have been able to interest you, I can truly say that such investigation as, at odd moments, I have been able to make into the circumstances which produced and the causes which have advanced the State public-school system has been a delight to me—such a delight as I know can not be transmitted through any ability of mine to tell the story. I would I had the time to tell you of some of the small but interesting and amusing matters I have come across in my reading—of the complaints of the regents and that first New York City association, because their lottery investments did not pay better dividends; of the tribulations in the State superintendent's office before Mr. Spencer proposed printed forms for trustees' reports in 1841; of General Dix's hurry and anxiety to get out his report "before the close of navigation;" of the poorer pay and "boarding around" experiences of the earlier teachers; of "summer schools" and "winter schools;" of the physical struggles to decide whether the teacher or the big boys should control the school; of David P. Page, the first normal principal, going about with horse and wagon to examine the candidates for admission and ordinarily determining that they were qualified; of Dr. E. A. Sheldon and Susan B. Anthony, noble man and noble woman that they were and are, sitting side by side in this association year after year, he with his resolutions for the consolidation and more effective organization of educational work, and she with her continual claim for equal rights and a fair show for her sex.

I would like to tell you also of Joseph Lancaster and the Lancastrian methods; of the philanthropy of James Wadsworth, who put The School and the Schoolmaster, a most excellent volume of 550 pages, in the hand of every officer and teacher in the State; of the reciprocal influences of the old academies upon the common schools and the schools upon the academies; of the stubborn contest with sectarianism; of the growth of high schools and night schools and technical schools; of a thousand things which have contributed to the development of the school system in its present form.

The field is a rich one, and it is to be hoped that some loyal son or daughter of the State, who is jealous of her glory and has an inclination and a gift for original research, will enter and cultivate it for the advantage and benefit of all her children.

NEW YORK LEADING THE NATION.

Looking back over the field we can not escape being impressed with the fact that New York has scarcely had full credit for the magnificent part she has borne in making the history of our common country. Few people, very few, have the leisure or the inclination for original research. The multitude are only too ready to take statements at second hand. It is commonly as helpful to the fame of a people to have had fervent poets, orators, and historians among their sons as to have performed the deeds which light the beacon fires of history. . . .

The colony at New Amsterdam loved liberty as dearly and certainly had as true a conception of the public institutions and regulations which guarantee civil and religious freedom as the colony at Plymouth. New York has contributed as liberally as New England to the material as well as the intellectual development of the country.

If these observations are just in any sense, they are as related to the building up of a system of common schools. The first public school in America of which we have any knowledge was upon Manhattan Island. The principle that all the property should educate all the children of a people was first enforced there. The oldest school in America is now maintained at No. 248 West Seventy-fourth street

in the city of New York. It was in the colony of New York that teachers were first required to be certified or licensed. New York was the first State in the Union to levy a general tax for the encouragement of elementary schools, as she was also the first to establish a permanent State common-school fund. She was the first to establish State supervision of elementary schools. She was the first to specially provide for the education of teachers, and she is now doing more for the professional training of teachers than any other. The institute system was first established in New York. She was the first to provide school district libraries. She was the first to publish a journal exclusively devoted to the interests of common schools. The first local association of a permanent character in the country among school teachers was in New York City. The first State teachers' convention in the country was held at Utica, and the oldest permanent State teachers association in America is the one I now have the honor to address.

The first woman's college in America was established at Elmira, and the old Albany Female Academy is the first higher educational institution for women the world ever knew. New York is the only State to have established a special court to determine all school controversies, and provide that its decisions shall be final and conclusive. It is the only State to provide architects' drawings and estimate for schoolhouses, and to determine the character of the structures which localities must provide for school purposes. It is the first and only State to give statutory recognition to the work of the colleges and universities in educating teachers, and to give the same recognition to teachers of acquired position who may come to us from other States. We are doing more to build up a teaching profession, by exacting proper qualifications on the part of teachers and protecting their legal rights, than is being done anywhere else in the country. The great State is spending more money and exercising closer supervision over common schools than any other. The legislative power has been and is continually being exercised to consolidate and systematize her educational work upon an intelligent plan, with a definite purpose, to a greater extent than any commonwealth East or West. It is no thoughtless, self-conceited boast, it is a fact in the case, which her teachers ought to understand, that they may appreciate the responsibility under which they rest, that for what she has done and what she is doing and what she is trying to do her common-school work occupies the leading position among the States of the American Union.

CONCLUSION.

I must conclude upon the instant. Even the hasty and superficial examination of the rise and development of our State common-school system, which we have been able to make in a single evening, will be fruitful of suggestions, which your interest in the subject will easily enable you to discern. The one which comes to me with more force than any other is that history clearly and unmistakably reveals the fact that free schools have invariably been the accompaniment and the support of civil liberty and of government by the people. Wherever there has been self-government there have been common schools; wherever there have been common schools mental strength and manly independence have developed, and the Government has been a democracy, or the kingship has been only a name.

We can not doubt the stability and the permanence of our unique American system of free schools. It is warp and woof of our social fabric the staunchest pillar of our governmental temple. The most deserving and practical patriots are the men and women who do most to simplify and perfect its machinery, to make its work ennobling, and to keep its life pure. The most insidious, and therefore the most dangerous, foe of the Republic is the man whose politics or whose religion, whose ignorance or whose selfishness, leads him, deliberately or unwittingly, to thwart the best results of its high and holy mission.

I thank you for your patience; it has seemed boundless. For all your thoughtful and considerate courtesy I make my most respectful acknowledgments; it encumbers the State superintendent with obligations which he has no power to repay save only in sincere and grateful appreciation.

NOTE.—Investigations, incident to the preparation of the foregoing address, have led me to think that an exhibit showing the extent and manner of school supervision which has been in operation in this State since the organization of the school system, together with a complete list of State superintendents, and a statement indicating the places of meeting, and the presiding officers at the various sessions of the different State associations, would be acceptable to the educators of the State, and I take the liberty of adding the same in a brief appendix. I also embrace the opportunity for acknowledging my indebtedness to C. W. Bardeen, of Syracuse, who kindly and generously loaned from his private library rare books and documents which have been of great assistance, not only in supplying this added information, but in the preparation of the address itself.—A. S. D.

APPENDIX.

System of supervision.

Year.	By State officer.	By county officers.	By city officers.	By town officers.
1795				
1813				
1841				
1847				
1851				
1856				
1890				

State superintendent.

Names.	Residence.	Chosen.
Gideon Hawley	Albany	Jan. 14, 1813
Welcome Esleeck	do	Feb. 22, 1821
Secretaries of State and superintendents, ex officio:		
John Van Ness Yates	do	Apr. 3, 1821
Azariah C. Flagg	Plattsburg	Apr. 14, 1826
John A. Dix	Coopersville	Apr. 1, 1833
John C. Spencer	Canandaigua	Apr. 4, 1839
Samuel Young	Ballston	Apr. 7, 1842
Nathaniel S. Benton	Little Falls	Apr. 3, 1845
Christopher Morgan	Auburn	Nov. 2, 1847
Henry S. Randall	Cortland	Nov. 4, 1851
Elias W. Leavenworth	Syracuse	Nov. 8, 1853
Department of public instruction:		
Victor M. Rice	Buffalo	Apr. 4, 1854
Henry H. Van Dyck	Albany	Apr. 7, 1857
Emerson W. Keyes *a*	do	Apr. 9, 1861
Victor M. Rice	Buffalo	Feb. 1, 1862
Abram B. Weaver	Deerfield	Apr. 7, 1868
Neil Gilmour	Ballston Spa	Apr. 7, 1874
William B. Ruggles	Bath	Mar. 14, 1883
James E. Morrison *a*	New York City	Jan. 1, 1886
Andrew S. Draper	Albany	Apr. 6, 1886

a Acting superintendent by reason of resignation.

New York State Teachers' Association.

Year.	Place.	President.
1845	Syracuse	John W. Bulkley.
1846	Utica	Chester Dewey.
1847	Rochester	Joseph McKeen.
1848	Auburn	Samuel B. Woolworth.
1849 *a*		Charles R. Coburn.
1850	New York	Do.
1851	Buffalo	John W. Bulkley.
1852	Elmira	Nehemiah P. Stanton.
1853	Rochester	Charles Davies.
1854	Oswego	Victor M. Rice.
1855	Utica	Reuben D. Jones.
1856	Troy	Leonard Hazeltine.
1857	Binghamton	Thomas W. Valentine.
1858	Lockport	George L. Farnham.
1859	Poughkeepsie	Oliver Arey.
1860	Syracuse	James N. McElligott.
1861	Watertown	Edward A. Sheldon.
1862	Rochester	James Cruikshank.
1863	Troy	Emerson C. Pomeroy.
1864	Buffalo	James B. Thomson.
1865	Elmira	Edward North.
1866	Geneva	James Atwater.
1867	Auburn	Samuel G. Williams.
1868	Owego	James W. Barker.
1869	Ithaca	William N. Reid.
1870	Syracuse	Samuel D. Barr.
1871	Lockport	J. Dorman Steele.
1872	Saratoga Springs	James H. Hoose.
1873	Utica	Edward Danforth.
1874	Binghamton	Andrew McMillan.
1875	Fredonia	H. R. Sanford.
1876	Watkins	Noah T. Clark.
1877	Plattsburg	Edward Smith.
1878	Albany	John W. Mears.
1879	Penn Yan	Casper G. Brower.
1880	Canandaigua	James Johonnot.
1881	Saratoga Springs	Jerome Allen.
1882	Yonkers	Albert B. Watkins.
1883	Lake George	J. A. Nichols.
1884	Elmira	Charles. T. Barnes.
1885	Saratoga Springs	S. A. Ellis.
1886	Niagara Falls	Charles E. Surdam.
1887	Elizabethtown	George Griffith.
1888	Watkins	J. W. Kimball.
1889	Brooklyn	E. H. Cock.
1890	Saratoga Springs	Walter B. Gunnison.
1891	do	James M. Milne.

a No meeting held on account of prevalence of cholera in New York.

Commissioners and Superintendents' Association.

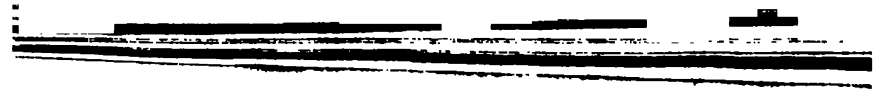
Year.	Place.	President.
1856	Troy	Victor M. Rice, State superintendent, ex officio.
1857	Cortland	H. H. Van Dyck, State superintendent, ex officio.
1858	Elmira	Do.
1859	Lyons	Do.
1860	Syracuse	Do.
1861	During the war, the association ceased to hold meetings.	
1862		
1863		
1864		
1865	Elmira	John W. Bulkley (reorganization).
1866	Geneva	John W. Bulkley.
1867	Auburn	James Cruikshank.
1868	Owego	Charles T. Pooler.
1869	Ithaca	(a)
1870	Syracuse	Jason B. Wells.
1871	Utica	Edward Smith.
1872	Rochester	(a)
1873	Saratoga and Utica	O. F. Stiles.
1874	Syracuse	Edwin McMath.
1875	Rochester	Do.
1876	Watkins	Do.
1877	Albany	Do.
1878	Utica	Andrew McMillan.
1879	Ithaca	Do.
1880	Auburn	Sidney G. Cooke.
1881	Utica	Do.
1882	Albany	George V. Chapin.
1883	Little Falls	Edward Wait.
1884	Rochester	George F. Crumby.
1885	Utica	J. Joel Crandall.
1886	Ithaca	Edward C. Delano.
1887	Syracuse	Jared Sandford.
1888	Binghamton	Charles E. White.
1889	New York	James L. Lusk.
1890	Cortland	Ezra B. Knapp.
1891	Batavia	Emmons J. Swift.

a It is impossible at present to supply these names. Any person who can do so will confer a favor by forwarding them.

Council of superintendents.

Year.	Place.	President.
1883	Syracuse	Edward Smith.
1884	Albany	Charles W. Cole.
1885	Auburn	David Beattie.
1886	Binghamton	L. C. Foster.
1887	Rochester	Charles E. Gorton.
1888	Utica	B. B. Snow.
1889	Albany	David Beattie.

Conferences of associated academic principals.

Year.	Place.	President.
1885	Syracuse	George R. Cutting.
1886	do	Do.
1887	do	Do.
1888	do	C. T. R. Smith.
1889	do	Do.

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